# THE EFFECTS OF SELF-EVALUATION WITH VIDEO ON THE USE OF ORAL LANGUAGE DEVELOPMENT STRATEGIES BY PRESCHOOL TEACHERS

by

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# ABSTRACT

In providing children at risk for reading difficulties with the necessary skills to be successful readers in school age programs, early childhood educators in high-quality preschool programs facilitate the development of emergent literacy and oral language abilities through language-rich environments. However, most teachers in preschool settings rarely use strategies necessary to build these skills in their students. Professional development efforts need to employ the most effective methods for providing early childhood educators with the knowledge, skills, and strategies to increase emergent literacy skills. Follow-up techniques that successfully support teachers in the transfer of new strategies to their classrooms are an important component of professional development training. A multiple-baseline design across participants was used in this study to examine the effects of an expert coaching model, which included teacher self-evaluation of videotaped observations and reflection on implementation of open-ended questions and expansions, on (a) implementation of strategies, (b) generalization of strategies to other settings, (c) teacher attitudes towards the coaching model, and (d) student outcomes. Data analysis showed that self-evaluation maintained or increased the use of teaching strategies, with the addition of modeling and guided practice bringing about continued improvement over baseline values. The use of open-ended questions generalized to other settings, increasing over baseline in the majority of participants. Teachers indicated the self-evaluation process was useful in improving their use of oral

language development strategies. The majority of students increased the use of one-word and two or more-word utterances, which resulted in an overall increase in words per minute. Implications for professional development designers and recommendations for future research are discussed.

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# CHAPTER 1

## INTRODUCTION

A substantial gap in achievement continues to exist between children from different backgrounds, with 55% of children growing up in poverty failing to meet basic literacy standards by the fourth grade (National Assessment of Education Progress, 2003). This disparity in reading achievement persists despite efforts over the past two decades to narrow the gap. A recent report from the National Center for Education Statistics (Lee, Grigg, & Donahue, 2007) recorded a slight gain in overall reading ability among all student groups at the fourth grade; however, the gap remained consistent between children from low-income backgrounds and their peers above the poverty level. Understanding contributing factors can shed some light on this persistent gap.

Family risk factors such as a non-English primary home language, household income below the poverty level, mother's highest education less than a high school diploma/GED, and single-parent households have been found to negatively contribute to children's reading achievement gains from kindergarten to the third grade (U.S. Department of Education, National Center for Education Statistics, 2004). Children growing up in families with these risk factors exhibit more difficulties as they begin reading instruction than their peers from middle-class families. The gap in reading achievement, shown to exist as early as kindergarten (Brizious & Foster, 1993; Dickinson

& Snow, 1987), suggests that families vary in the amount of support given to their children's early literacy and language growth. Parents from low-income families often have fewer resources, limited education, and engage in discourse less often, resulting in their children having fewer conversations with adults and hearing fewer words than more advantaged peers (Hart &Risley, 1995). Consequently, children entering kindergarten with comparatively weak language and literacy skills are more likely than other students to display difficulties in immediate and long-term reading development (Gallagher, Frith, & Snowling, 2000; O'Connor & Jenkins, 1999). In addition, some aspects of children's literacy abilities at the completion of kindergarten, such as word recognition and phonemic awareness, have been found to predict reading success into the future (Cunningham & Stanovich, 1997; Dickinson & Tabors, 2001; Juel, 1988; Storch & Whitehurst, 2002; Tabors, Snow, & Dickinson, 2001).

With schools unsuccessful in reducing inequality in literacy abilities, and the realization that these abilities become more stable during the elementary grades (Lonigan, Burgess, Anthony, & Barker, 1998), there has been an increased emphasis on the preschool years in looking for answers. Given that early literacy and language achievements are relatively malleable during the preschool years (Dickinson, McCabe, & Essex, 2006), and that reading difficulties are more resistant to remediation after the third grade (Good, Simmons, & Smith, 1998; Stanovich, 1986; Torgesen, 2000), preschool settings offer a timely opportunity to address future reading difficulties through the development of literacy-related skills. As more and more children are attending center-based childhood and preschool educational programs (U.S. Department of Education, National Center for Education Statistics, 2006) it is hoped that such attendance will

improve emergent literacy and language abilities, which have consistently been found to exert significant influence on young children's transitions to school-aged programs, and upon future reading success (Dickinson & Tabors, 2001; Whitehurst & Lonigan, 2001).

## Emergent Literacy

Adams (1990) indicates that the act of reading requires the interaction and coordination of various skills, including letter recognition, the translation of letters into sounds, understanding word meaning, and the interpretation and understanding of the text as a whole. In a mature, fluent reader these skills are integrated and work seamlessly; in developing readers this is not the case (van Kleeck, 1998). In the preliterate child a number of abilities, knowledge, and attitudes are being developed in the preschool years that lay the foundation for later reading and writing achievement (Whitehurst & Lonigan, 1998). These key foundational skills, necessary for children entering kindergarten to succeed in learning to read, and generally categorized as phonological awareness, print knowledge, and language skills (Dickinson & Smith 1994; Lonigan, Anthony, Phillips, Purpura, Wilson, & McQueen, 2009), are correlated and formed into mutually reinforcing systems of knowledge that lead to reading and writing abilities (Dickinson, McCabe & Essex, 2006).

In the development of code-related skills such as an emerging knowledge about print, preschool children are acquiring the ability to name letters and associate letters with sounds. They are gaining an understanding of the conventions of print, as in knowing that print goes from left to right and from top to bottom. Phonological awareness, another code-related skill, involves children's developing sensitivity to sounds and an understanding that sounds can be combined to make words. These code-related skills are

among those identified by the National Early Literacy Panel (2008) as the best early predictors of future literacy success.

In addition to code-related skills, The National Early Literacy Panel (2008) has also indicated that improved language skills should be a valued outcome when considering literacy development in preschool children. This recommendation is supported by extensive research on emergent literacy maintaining the concept that early language skills (vocabulary, syntax, and discourse) are central to early and long-term literacy success (Bracken, 2005; Dickinson, McCabe, Anastasopoulos, Peisner-Feinberg, & Poe, 2003; Justice, Kaderavek, Fan, Sofka, & Hunt, 2009; Klecan-Aker & Caraway, 1997; NICHD Early Child Care Research Network, 2005; Snyder & Downey, 1991). This critical link between language skills and early and lasting literacy achievement also supports the concept that oral language aids in the development of cognitive and other behavioral systems that directly affect early literacy abilities (Dickinson, McCabe, Anastasopoulos, Peisner-Feinberg, & Poe, 2003). In addition to the benefits found in enhanced oral language skills, Dickinson et al. (2003) have found that children acquire added benefit when language and literacy-related aptitudes are developed concurrently to promote the interconnected supports of these knowledge systems.

The language skills of children living in poverty have been well documented, with findings indicating that children entering Head Start programs average one standard deviation below national norms on receptive vocabulary measures (Dickinson, St. Pierre, & Pettengill, 2004; Zill & Resnick, 2006), placing these children a year or more behind their peers. Additional research indicates that children from low-income backgrounds enter school-age programs already behind their peers in language ability (Whitehurst,

1997), phonological sensitivity (Bowey, 1995; Dickinson & Snow, 1987), and knowledge of print concepts (Smith & Dixon, 1995). Children growing up in homes with limited shared reading and exposure to print materials have been found to display poor language skills, signifying a strong relationship between oral language and code-related skills (Storch & Whitehurst, 2001). This, in turn, places these children with deficit oral language and code-related skills at risk for later reading difficulties (Dubow & Ippolito, 1994; White, 1982). In attempts to mitigate this problem, the last decade has seen children from low income backgrounds specifically targeted for emergent and early literacy interventions through such actions as The No Child Left Behind Act (2001), and the subsequent addition of Reading First and Early Reading First programs. These measures reflect concerns that limited language and literacy experiences ill-prepare these children to benefit from formal reading instruction in kindergarten and elementary grades.

**Implications for Children with Special Needs**

Among preschool children from low-income families attending Head Start programs are many who are, or will be identified as having special needs, reflecting Head Start directives mandating at least 10% of their enrollment be students with disabilities. Of those children identified with special needs while attending Head Start programs in 2007-2008, more than half of these were diagnosed with speech or language impairments (Allen, 2008, October 28). This number is consistent with national statistics finding speech or language impairments accounting for 52% of preschool children with individualized education plans (IEP) (Carlson, Daley, Bitterman, Riley, Keller, Jenkins, & Markowitz, 2008).

Speech and language impairments accounting for such a large percentage of children with disabilities is significant in light of the fact that language impairment detected in the preschool years has been shown to lead to later difficulties in decoding and comprehension (Snowling, Bishop, & Stothard, 2000; Stothard, Snowling, Bishop, Chipchase, & Kaplan, 1998), placing these children at risk of becoming poor readers, or nonreaders (Snow et al., 1998). Snowling et al. further indicate that having good decoding skills will not guarantee normal progress in reading in children who have language impairments in preschool. As reading tasks become more involved, oral language skills, including syntactic and semantic skills, play an important part in literacy development. Not only these children but those with other disabilities can also be at risk for developing inadequate literacy-related language abilities (Nielson & Luetke-Stahlman, 2002). With a range of disabilities and varying degrees of severity, children with disabilities do not constitute a homogeneous group. Therefore, while some children with disabilities have problems in all areas of language development, others may have only specific deficits, resulting in oral language skills having differing degrees of impact on future reading abilities (Silva, McGee, & Williams, 1985).

As discussed earlier, children being raised in poverty may have fewer literacy experiences in the home than typically developing peers. Interestingly, Marvin and Mirenda (1993) also found this to be the case for children with disabilities. Parental time spent reading books and the frequency of joint reading were consistent with those involving typically developing children; however, differences were found in the use of literacy-related oral language (providing explanations, making predictions, and reciting rhymes and poems), resulting in fewer oral literacy opportunities for children with

disabilities. In addition, parents reported giving low priority to the development of literacy skills, and having lower expectations for their children with disabilities. Other such studies (Craig, 1996; Light & Smith, 1993) found similar outcomes.

The preschool classroom is another setting where children with disabilities have been found to have fewer literacy-related opportunities than normally developing classmates (Ezell & Justice, 2005; Fitzgerald, Roberts, Pierce, & Schuele, 1995; Koppenhaver, Evans, & Yoder, 1991; Rex, Koenig, Wormsley, & Baker, 1995; Watson, Layton, Pierce, & Abraham, 1994). Bruns and Mogharreban (2007) found more than two thirds of early childhood and early childhood special education teachers reported they were knowledgeable about the development process of an IEP, though many expressed concerns related to their ability to implement IEP goals within the classroom. This uncertainty may manifest itself in not knowing how to fully include some children with disabilities in classroom activities and routines.

**Student Outcomes**

Focusing on social-emotional development rather than cognitive readiness, Head Start and other government programs have given low priority to reading and writing in the past (McGill-Franzen, Lanford, & Adams, 2002; Ohio state Legislative Office of Educational Oversight, 1998), which has resulted in short-term gains in social-emotional development but little improvement in cognitive skills for children entering kindergarten (U.S. Department of Health and Human Services, 2001). This imbalance need not require an "either/or" solution. Social-emotional development should not be replaced by a complete focus on cognitive skills; literacy-related oral language interventions, in

particular, can have multiple, overlapping outcomes that relate to both social-emotional and cognitive objectives (Dickinson, McCabe, & Essex, 2006).

A large body of literature has shown the literacy-related oral language skills of vocabulary, syntax knowledge, and discourse to consistently predict and contribute to future reading success (Beals & DeTemple, 1993; Biemiller, 1999; Dickinson & Tabors, 2001; Scarborough, 2001) . Vocabulary, a child's knowledge of word meanings, has been found to be a strong predictor of reading success. Hart and Risley (2003) found that a child's vocabulary at age three was a strong predictor of reading comprehension in the third grade. Other researchers report similar results (Biemiller, 1999; Cunningham & Stanovich 1997; Dickinson & Tabors, 2001). In Scarborough's meta analysis (2001) associations between both expressive and receptive vocabulary skills and reading development have been substantiated. In addition, research seems to support that the size of a child's vocabulary plays a part in strengthening emergent phonological awareness (Goswami, 2001; Metsala, 1999; Walley, Metsala, & Garlock, 2003).

Syntax, the ability of a child to organize words into meaningful and grammatically correct sentences, has also been found to impact future reading abilities. In comparing the complexity of sentence use in preschool children, Scarborough (1990) reports sizable differences between those who had future reading difficulties and those who did not. More recently correlations have been found between receptive syntactic ability and future reading success (Scarborough, 2001).

The final literacy-related oral language skill, discourse, can be divided into two types. Explanatory talk is talk that requests and/or makes logical connections between events, objects, conclusions, and concepts (Beals, 1993). Explanatory talk between a

child and someone else stretches current knowledge and abilities, both linguistically and cognitively, allowing the child to make new connections (Beals & DeTemple, 1993).

Narrative talk is a type of extended discourse in which an event is discussed that happened in the past or will take place in the future. Both types of discourse are commonly used by preschool children, parents, and teachers; in addition to being used in the readings required of school-aged students. These types of discourse have been found to positively impact future literacy and language development, and academic abilities (Beals, 2001; Bishop & Edmundson, 1987; Dickinson, Cote, & Smith, 1993; Fazio, Naremore, & Connell, 1996; Vernon-Feagans, Hammer, Miccio, & Manlove, 2001).

Increasing the participation of preschool children in conversations with adults has been shown to improve oral language abilities (Girolametto, Weitzman, & Greenberg, 2003). It is through conversation that children acquire a fundamental understanding of the conventions of communication, beginning with oral language and thus setting the stage for the future understanding of written communication. Researchers have also found a connection between increased conversations with adults and vocabulary improvement in preschool children, which in turn is a consistent predictor of future reading ability (Wasik, Bond, & Hindman, 2006). In addition, children who have been encouraged to converse regularly with adults in preschool settings begin using more multiword combinations along with becoming more talkative to both adults and their peers (Girolametto et al., 2003). This resultant increase in sentence complexity (sentence length, syntax and semantics) has also been shown to be a predictor of future reading ability (Scarborough, 2001).

Children being raised in poverty, often participating in fewer conversational exchanges with their caregivers (Hart & Risely, 1995; Snow, Burns, & Griffin, 1998), do not necessarily find a solution for improving vocabulary, syntax and discourse skills within educational settings. The reality of preschool classrooms today is that children spend very little time in these types of conversation with adults (Dickinson & Tabors, 2001).

## High Quality Preschool Programs

As more than half of our nation's preschool age children attend some type of formal center-based early childhood program before entering kindergarten, many of these children come from backgrounds with multiple risk factors for developing future reading problems. With the varying support that children receive from their home environments, it is important for center-based programs to provide excellent opportunities for developing the skills needed for future success. After taking into account family background factors, research has shown that high-quality center-based preschool programs improve children's abilities as they enter kindergarten (NICHD Early Child Care Research Network, 2000, 2002; Tabors, Snow, & Dickinson, 2001). Additionally, with high-quality supports in preschool programs, children from low-income backgrounds can display average developmental growth upon entering kindergarten (Landry, Smith, Swank, Assel, & Vellet, 2001). Continuing research produces evidence that high-quality preschool programs not only improve abilities at the beginning of kindergarten, but account for long-lasting benefits well beyond (Bowman, Donovan, & Burns, 2000; Shonkoff & Phillips, 2000).

**Quality Indicators**

The characteristics of high-quality early childhood programs can be divided into three distinct categories. The first, structural quality, includes those issues that can be controlled through the policies of the governing institution or organization. The National Association for the Education of Young Children (NAEYC) recommends that policymakers consider comprehensive professional development, staff-child ratios, and staff compensation as those structural points conducive to providing a high-quality program (Bredekamp & Copple, 1997). The National Institute for Early Education Research (NIEER; Barnett, Epstein, Friedman, Boyd, & Hustedt, 2008) includes other considerations such as class size, teacher assistant training, and other services provided that address health and family supports. Inconsistent support from research targeting the effectiveness of these structural characteristics to improve child outcomes has been a concern (Mashburn, 2008); however, as Pianta (2005) points out, structural features are not as highly correlated to student outcomes as preschools become more highly regulated.

The second category involves the quality of classroom processes. Such processes relate to the actual experiences of the children in the classroom, those that deal with the interactions between teachers and children. These include emotional supports, classroom organization, and instructional supports (Hamre & Pianta, 2007).

An emotionally supportive classroom would reflect a positive atmosphere where adults are sensitive to the needs of their students, both academic and emotional (Hamre & Pianta, 2005; National Association for the Education of Young Children, 2004; Sandall, Hemmeter, Smith, & McLean, 2005). Classroom organization includes formats of instruction that encourage learning, productive use of class time, and effective behavior

management (Hamre & Pianta, 2007). Instructional supports within the high-quality preschool classroom will encourage the use of language and the development of problem solving skills, along with feedback from adults that extends learning for all students (Barnett, Hustedt, Robin, and Schulman, 2005; Hamre & Pianta, 2007).

Children's language abilities are known to be largely influenced by their linguistic environment (Dickinson & McCabe, 2001; Girolametto, Hoaken, Weitzman, & van Lieshout, 2000; Hart & Risely, 1995), which include not only the home environment but also center-based learning settings (Dickinson & Sprague, 2001). Preschool classrooms have been shown to contribute to children's acquisition of literacy-related language skills (Connor, Morrison, & Slominski, 2006; Dickinson & Tabors, 2001). For this reason the final characteristic of high-quality preschool classrooms is to provide a language-rich environment in which all students have opportunities to strengthen language abilities. Casbergue, McGee, and Bedford (2008) categorized the major considerations for a language-rich environment as (a) reading and writing routines, (b) literacy materials, (c) classroom space, and (d) teacher practices and language. Providing routines, space and materials for developmentally appropriate reading and writing activities offers opportunities for growth in foundational skills for literacy.

Teacher practices, on the other hand, include those strategies of planning, organizing and supporting activities and routines in the classroom that will be conducive to literacy-related oral language development. Because most children, including those from low-income populations, English language learners, and many of those with special needs, learn how to use language by interacting orally with others, environments that provide little chance for talking with others will limit language development. It is not

surprising, then, to find a positive relationship between high-quality preschool teacher language and increased development in student oral language skills (Wasik, Bond, & Hindman, 2006).

The importance of teacher language to model, encourage, direct, and expand student language development in the preschool classroom requires that emphasis be placed on oral interactions between teachers and students. Longitudinal studies looking at teacher-child language interactions have shown that the quality of the teacher-child interaction in the preschool years is the most significant predictor of improved language and cognitive development in school age programs (NICHD Early Child Care Research Network, 2000, 2002; Tabors, Snow, & Dickinson, 2001). Indicators of high-quality teacher-child interactions include responsive conversations in formal and informal settings (Girolametto & Weitzman 2002; Vasilyeva, Huttenlocher, & Waterfall, 2006) that include forms of explanatory (Beals et al., 1993) and representational conversation (McCartney, 1984), and advanced linguistic models (Dickinson & Tabors, 2001; Huttenlocher, Vasilyeva, Cymerman, & Levine, 2002; Wasik, Bond, & Hindman, 2006). Along with these quality indicators of teacher-child interactions, the quantity of time children spent talking with and listening to adults in these types of cognitively rich interactions has been shown to impact literacy-related language skills (McCartney, 1984).

**Oral Language Development Strategies**

The growth in vocabulary, syntactic skills, and discourse desired for children at risk for future reading problems can be attained through the use of evidence-based strategies in the preschool classroom. These strategies are best utilized in the context of quality teacher-child interactions. The manner in which teachers approach conversations

with students has been found to influence the impact of such interactions. Responsive language interactions, characterized by responding to students' interests and attempts at communication, support language growth in young children (Hoff & Naigles, 2002; Masur, Flynn & Eichorst, 2005; Pine, Lieven, & Rowland, 1997).

General strategies for development of the literacy-related language outcomes for preschool-age students can be categorized into those addressing vocabulary, syntax and discourse skills (Dickinson, Watson, & Farran, 2008). To encourage vocabulary growth teachers should use a wide vocabulary, clearly communicating the meaning of unknown words. Preschool teacher vocabulary use has been shown to predict kindergarten language and literacy achievement (Cote, 2001; Dickinson & McCabe, 2001). Exposure to different words, especially those fairly sophisticated for the age of the child, used in ways that convey meaning, has been shown to predict vocabulary development (Weizman & Snow, 2001). Dickinson and McCabe (2001) found that it is especially useful to introduce new vocabulary during informal activities during the school day, such as center and meal times. Additionally, children seem to acquire new words in the context of conversations, rather than in isolation (Wasik, Bond, & Hindman, 2006).

Extended talk on a single topic has been shown to promote language skill development, especially when teachers encourage children to continue talking and limit how much they themselves talk (Dickinson & Tabors, 2001). Types of adult-child talk that have been shown to predict future reading achievement include cognitively rich, decontextualized and analytical conversations (Dickinson, Watson, & Farran, 2008; Tabors, 1997), referential talk (Barnes, Gutfreund, Satterly, & Wells, 1983; Hoff-Ginsberg, 1991), and inferential talk (van Kleeck, Vander Woude, & Hammett, 2006.

Questioning strategies such as the use of open-ended (Dickinson, & McCabe, 2001; Whitehurst et al., 1988), reactive, predictive, descriptive, and recall questions can affect language skills (Wasik et al., 2006; Peterson, Jesso, & McCabe, 1999). Teachers providing feedback to students within conversations and using active listening strategies have also been shown to improve language outcomes (Wasik et al., 2006).

Syntactic skills can be developed and improved through the teacher use of various strategies in connection with language interactions with students. These include the semantically contingent responses of recasts, a strategy of repeating a child's utterance using varied syntax, along with expanding the child's utterance by repeating and adding missing information (Girolamettto et al., 2003), extending the child's utterance to include new information (Justice, Mashburn, Pence, & Wiggins, 2008), and modeling language the child is not yet using independently (Pence, Justice, & Wiggins, 2008). The syntactic complexity of teacher language has also been shown to account for growth in the comprehension of complex syntax in children from low-income backgrounds (Huttenlocher et al., 2002).

**Challenges**

Children who experience teacher-child interactions that include the above strategies have been found to use more multiword combinations and increase their overall talkativeness to both adults and peers (Girolametto et al., 2003). While these high quality oral language interactions initiated by teachers have been shown to improve oral literacy in preschool children, Justice, Mashburn, Hamre, and Pianta (2008) found that the average teacher rarely used such strategies. These findings seem to indicate that oral

language development and literacy instruction strategies are not being utilized to the extent necessary for optimum growth within many preschool settings.

## Professional Development

There is great variance in the educational requirements for teachers of preschool age children (Winton, McCollum & Catlett, 2008). Multiple disciplines working together to provide services for preschool-age children establish their own training requirements, ranging from high school diplomas to 4-year university degrees or higher, depending on the state, locale, or program. Other factors impacting the preschool workforce include the underfunding of programs, high attrition, and low pay.

With students more likely to demonstrate cognitive gains that continue into kindergarten when they have teachers who are trained in early literacy skills (Girolametto et al., 2003; Whitehurst & Lonigan, 1998), it would seem that such training would be a uniform requirement for teachers of early childhood programs. Unfortunately, repeated evidence indicates that children attending center-based preschool programs are not receiving the oral language supports necessary for optimum language growth (Bryant, Burchinal, Lau & Sparling, 1994; Dickinson & McCabe, 2001; Dickinson & Tabors, 2001; NICHD Early Child Care Research Network, 2000; Smith & Dickinson, 1994). For this reason it is important that efforts be made to assist preschool teachers in the use and improvement of language and literacy strategies in the classroom (Dickinson & Brady, 2006). Interestingly, Epstein (1999) found that while public schools teachers' formal education was positively related to the quality of the preschool program, in Head Start programs, in-service training, rather than formal education, was more highly related to quality. This finding seems to indicate that professional development offers effective

opportunities for increasing the quality of early childhood programs. Professional development is seen as a highly promising strategy for the implementation of educational practices and programs shown to promote learning among children (Ramey & Ramey, 2008). Specifically in respect to oral literacy, professional development has been shown to increase preschool teachers' conversational skills targeting the improvement of student early literacy and language skills (Girolametto et al., 2003).

There is ample research supporting professional development as a means of training once professionals are in the field. A problem exists, however, because the vast majority of studies have relied upon satisfaction surveys from teachers and researchers. Rarely does the research address the true focus of these training experiences; the actual improvements in teaching practices and student learning outcomes (Bertcher, 1988; Guskey, 2000; Guskey, 2003a). This has resulted in a lack of consensus on what constitutes good professional development. It may, then, be beneficial to look at adult learning concepts that should underpin effective professional development.

**Adult Learning**

Professional development success depends, not only on the quality of the information being shared, but on the manner in which it is shared and learned. Recent adult learning theory has been guided by principles first outlined by Knowles (1996) for developing methods and strategies to improve knowledge acquisition and use. These principles include readiness-to-learn, self-directedness, active learner participation, and solution-centered. A majority of all currently used adult learning methods and strategies include some or all of these principles (Dunst & Trivette, 2009).

Donovan, Bransford, and Pelligrino (1999) further identify three elements of adult learning that address how people acquire, learn, and master new information and material. The first element points to the need for new information and material to relate to the learners' existing knowledge and be relevant to their own circumstances. The second element focuses on the application of knowledge in context. The final element outlined by Donovan et al. emphasizes the need for ongoing monitoring and self-assessment of progress. Similarly, in a recent synthesis of evidence-based research involving adult learning methods Trivette, Dunst, Hamby, and O'Herin (2009) have shown that the most effective learning methods and practices actively involve learners in the acquisition, use and evaluation of knowledge and practice.

**Designing Effective Professional Development**

Several national organizations have developed and published guidelines for the designing of effective professional development experiences, including NAEYC (National Association for the Education of Young Children, 2004) and the Council for Exceptional Children's Division of Early Childhood (DEC) (Sandall, Hemmeter, Smith, & McLean, 2005). While these and other sets of guidelines have items in common, the evidence from cited research regarding many of the characteristics on these guideline lists is inconsistent and at times contradictory (Guskey, 2003a). Whitehurst (2002) cautions that there are few rigorous research studies on strategies for professional development that actually relate training characteristics to student outcomes. The overwhelming majority of past research has focused on participant satisfaction as a means of evaluating the success of professional development experiences rather than student outcomes.

To address this issue of lack of focus on student outcomes, Guskey (2001a; 2001b) recommends reversing the order of how professional development is traditionally planned. This "backward planning" begins with the identification of desired student outcomes. Once identified, the desired outcome(s) guides the planning, implementation, and evaluation processes. This reversal in professional development planning, emphasizing student outcomes, requires evaluation of success to lie not with participant satisfaction of the learning experience, but with the impact the experience has on specific improvement in student performance (Guskey, 2003).

Drawing from characteristics of professional development that reflect adult learning theory and methods, guidelines for developing training experiences that have the likelihood of attaining prescribed learner outcomes in preschool settings have been suggested (Winton et al., 2008). In-service training that can be sustained over time, is grounded in practice, linked to curriculum and student outcomes, is collaborative in nature, and interactive is consistent with those characteristics of adult learning methods shown to link training with learner outcomes.

Dunst and Trivette (2009) highlight three main features that best explain what has been found to have the greatest impact on what matters most in terms of learner outcomes. These characteristics are similar to key features of effective adult learning practices described by Graham and Wedman (1989) and others (Winton et al., 2008). The first important feature of effective adult learning occurs during both the planning stages of professional development design and its implementation. This feature encompasses the introduction of new material, knowledge, or practice, and the illustration of its use or applicability. Learner outcomes are more strongly related to the learning method

characteristics when the learners are actively involved in determining the results of their learning experiences, including pretraining participation. The most effective forms of pretraining involvement, in which to introduce the learning topic, were found to be out-of-class activities, self-instruction, warm-up exercises, and preclass quizzes (Dunst & Trivette, 2009).

In addition to the above-mentioned strategies for learner involvement prior to the actual professional development training experience, Winton, McCollum, and Catlett (2008) have stressed the importance of a needs assessment. Occurring well before the implementation of any professional development training, taking the time to assess the needs of the students, teachers, and programs as a whole will bring about results which will improve the actual training experiences. Assessing the needs of the participants will give learners a sense of ownership (Knowles, 1980, 1990), making them more likely to commit to learning when the goals of training are relevant and important to them (Bruder & Nikitas, 1992; Wood & Thompson, 1980). Through needs assessment baseline data can be gathered to assist in evaluation efforts (Winton et al., 2008). Helping to establish a shared focus and agenda, this is especially important for agency- or community-wide professional development initiatives (Buckley & Mank, 1994).

The second feature having greatest impact on learner outcomes is the application of the materials, practices, or knowledge being presented (Dunst & Trivette, 2009). Application is where the learner is engaged in the practice and evaluation of the material, practice, or knowledge. Giving teachers many opportunities for learning over extended amounts of time has produced positive results (Garet, Porter, Desimone, Birman, & Yoon, 2001). Bransford, Brown, Cocking, Donovan, Bransford, and Pelligrino (2000)

emphasize the importance of the instructor in his or her role to assist the learner in becoming engaged in the content, making connections with previous understanding, and making correction as needed. Instructor- or trainer-guided learning opportunities that use a combination of real-life application of the learning topic and role-play exercises are most effective for encouraging the learner to use newly learned knowledge or practice (Dunst & Trivette, 2009). Other aspects of the training situation impacting learner acquisition and application of knowledge point to adult learning methods that include small numbers of learners (<30) and multiple sessions over time (Dunst & Trivette, 2009).

The final feature having greatest impact on learner outcomes refers to those activities taking place after the professional development session. These have been referred to as deep understanding (Dunst & Trivette, 2009), or follow-up (Winton et al., 2008). Considering that the transfer of learning in professional development does not automatically take place (Joyce & Showers, 1988, 2002), this component refers to strategies designed to increase the likelihood of teachers transferring the knowledge and skills acquired to their practices in classrooms following professional development training. In the preschool setting, the follow-up strategies of coaching and peer support groups have been effective in transferring learning to the classroom (Kohler, McCullough, & Buchan, 1995; Peck, Killen, & Baugart, 1989; Tschantz & Vail, 2000), in the continued development of new skills (Joyce & Showers, 2002), and in the retention of skill use (Miller, Harris, & Watanbe, 1991).

In addition to the three features noted above, another component must be considered. Evaluation, following professional development experiences, is imperative

for determining the degree to which desired outcomes were met (Dickinson & Brady, 2006; Guskey, 2002). Evaluation can also support modifications in the professional development program and give direction for future endeavors. Effective evaluation methods can be useful for the planning, decision making and resource allocations of all stakeholders in professional development (Winton et al., 2008).

**Coaching**

With the recognition that one-time professional development trainings without continued follow-up or support are ineffective in improving teacher practice, coaching has increasingly been used to address this and other issues. As new skills require practice, support, and ample time to be mastered (Fiene, 2002), coaching allows teachers the time to practice and perfect new skills in the context of their own classroom with their students. Seen as a key to spanning the gap between research and practice (Knight, 2009), and making on-site follow-up more accessible (Knapp-Philo & Stice, 2004), significant increases in teacher implementation of the strategies taught in professional development trainings have been shown through coaching (International Reading Association for the Education of Young Children, 1998; Joyce & Showers, 2002; Landry, Swank, Smith, Assel, & Gunnewig, 2006).

Coaching can be described as an interactive process between a coach and a learner consisting of a series of conversations focusing on agreed upon outcomes (Flaherty, 1999; Kinlaw, 1999). Flaherty further defined coaching as "not telling people what to do, [but] giving them a chance to examine what they are doing in light of their intentions" (p.xii). In this way, coaching supports self-observation, self-correction, and a continuation of the learning process. This is accomplished through examination,

reflection, discussion, and refinement of one's knowledge and skills (Flaherty, 1999; Gallacher, 1997; Kinlaw, 1999).

A number of coaching models have been developed, refined, and implemented in recent years. While these coaching models have their roots in school age programs, their modified application in early childhood settings have been shown to be effective (Armstrong, Cusumano, Todd, & Cohen, 2008; Vail, Tschantz, & Bevill, 1997). Walpole and Meyer (2008) identify two classifications of coaching models: the first being those which emphasize coaching within the training of a particular curriculum, referred to as training models. Programs such as Reading Recovery (Reading Recovery Council of North America, 2004), focusing on first-grade struggling readers, and Success for All (Borman, Slavin, Cheung, Chamberlain, Madden, & Chambers, 2005), intended for whole-school literacy reform, stress the preparation of the trainer and those being trained. These specific curricular models depend on ongoing site-based coaching to support fidelity, with coaches having detailed lesson outlines to share with teachers, along with structured observations to make.

The second category of coaching models, process coaching, includes those that stress the process of coaching itself, adaptable to any curriculum. Popular process models of coaching include peer coaching (Joyce & Showers, 1996), and cognitive coaching (Costa & Garmston, 2002). Peer coaching has evolved over the years into two distinct types: reciprocal coaching and coaching by experts (Ackland, 1991). Reciprocal coaching is characterized by teachers observing one another and providing feedback. Expert coaching, on the other hand, utilizes a professional with a specific expertise to observe and provide feedback and recommendations for improvement to teachers. Both of these

types of peer coaching have been found to be successful in changing teaching behaviors (Cain, Rudd, & Saxon, 2007; Kohler et al., 1995; Miller, 1994). In their study of expert coaching as a component of literacy training for early childhood providers, Armstrong et al. (2008) found that those teachers receiving coaching demonstrated increased growth in knowledge skills and greater confidence in the implementation of new strategies in their classrooms. In another study, teachers receiving weekly coaching support from expert literacy coaches, coupled with professional development on early literacy acquisition and instruction, saw significant increases in performance of their students on literacy outcome measures (Mohler, Yun, Carter, & Kasak, 2009).

Cognitive coaching has been described as the application of specific strategies in conjunction with reflective planning conferences, within a nonjudgmental, collaborative environment (McLymont & da Costa, 1998). Cognitive coaches participate in conversation with teachers, make classroom observations, and then encourage these teachers to deeply reflect on their practices. This is done through the explicit use of powerful questions and building rapport between coach and teacher.

Hybrid models, drawing on characteristics from training and process models of coaching have been used, focusing on a particular curriculum. Walpole and McKenna (2004) offer a coaching model aimed at whole-school reform highlighting research finding to inform teacher practices, sharing child achievement data, and conducting professional book studies. Team-based models of coaching, such as the Boston Plan for Excellence in the Public Schools' Collaborative Coaching and Learning model (Neufeld, 2002), use a team-based focus, including teacher choice. Demonstration-focused models of coaching, such as America's Choice (Poglinco, Bach, Hovde, Rosenblum, Saunders, &

Supovitz, 2003), feature a demonstration classroom where a teacher's knowledge and expertise with the curriculum is shown to colleagues.

Another advantage to the use of coaching as a means of follow-up and continued teacher support is the opportunity made available to teachers to reflectively consider interactions with their students. Reflection is what distinguishes coaching from other forms of follow-up strategies, such as consultation, supervision and training (Rush & Shelden, 2005) and is included in all models of coaching previously discussed. Through a coach's use of open-ended questions and the provision of time for reflection, teachers are given a forum for thoughtful observation, reflection, and discussion of the skills and strategies they are learning to use effectively in the classroom (McLymont & Costa, 1998). Opportunity is also provided to identify gaps between theory learned in teacher training or professional development and one's own classroom practice (Cochran-Smith & Lytle, 1993). Planned opportunities for reflection on classroom practice also support recommendations from the Division of Early Childhood (DEC) of the Council for Exceptional Children stating that faculty and other trainers should include in-service opportunities that require students or participants to engage in reflection and self-knowledge (Miller & Stayton, 2005).

## Self-evaluation Using Video

Snow et al. (1998) pointed out that teachers should not view their professional development as something that ends after graduation, graduate courses, or even after in-service trainings. Rather, teachers should view professional development as a career-long endeavor. To accomplish this, teachers should be given, and take advantage of, regular opportunities for self-examination and reflection. Reflection, long a part of teacher

education programs (Fendler, 2003), can be used by teachers, preservice as well as in-service, to observe themselves in interactions with their students (Sherin & van Es, 2005; Welsch & Devlin, 2007). Not having to rely solely on memory, videotaping classroom activities allows teachers to view classroom practices afterward when more time can be given to reflect on their own and their students' interactions.

Researchers have found that the ways expert teachers teach become automatic as routines are developed and repeatedly used with students (Leinhardt & Greeno, 1986; Leinhardt, Putnam, Stein, & Baxter, 1991). Given the ability to view their interactions with students, teachers have increased what they notice and improve how they interpret those interactions (Sherin & van Es, 2005).

Analysis of videotaped classroom observations has been shown to promote teacher learning (Finn, 2002; Frederiksen, Sipusic, Sherin, & Wolfe, 1998; Roth & Chen, 2007; Sherin & van Es, 2005). Teachers who use videotaped observations are also more likely to base a significantly larger part of their analytical reflections and instructional decisions on evidence rather than subjective feelings, inferences, or memory (McConnell et al., 2008). In addition, research suggests that teachers are more able to make more specific comments about their teaching practices, shift the focus of reflection from classroom management to instructional issues, and focus less on themselves and more on the children with the use of videotaped observations (Armstrong, 1999; Napper-Owen & McCallister, 2005; Rosaen, Lundeberg, Cooper, Fritzen, & Terpstra, 2008). As the engagement of the teacher in the self-observation process is critical, Hamre, LoCasale-Crouch, and Pianta (2007) found that videotaped observations had a more powerful

ability to reveal to teachers inappropriate or ineffective interactions than did the same information relayed by a coach.

While the use of video is becoming a more frequent component of preservice programs and professional development for teachers of school-age students (Sherin & van Es, 2005), videotaped observations have been paired with reflection and coaching models in comparatively few studies on the preschool level. As in the study of Cain et al. (2007) and others (Dickinson et al., 2008), it is more common for observations to be videotaped for analysis by researchers or for coaching purposes, not with the intention of being shared with teachers for use in self-observation. Those studies that include videotaped observations for the intention of supporting the process of self-observation and reflection (e.g., Girolametto et al., 2003; Hamre et al., 2007) have done so as a part of the overall intervention or professional development model, but not as a specific focus on the effects of self-observation through video itself.

## Problem Statement

With the gap in reading ability persisting between children from low-income backgrounds and those above the poverty line, efforts continue to be made to improve emergent literacy skills in preschool children (Connor, Morrison, & Slominski, 2006; Dickinson & Tabors, 2001). Focusing on the goal of arming all children with on-level literacy-related skills as they enter kindergarten will require high quality preschool programs that encourage emergent literacy and oral language skills acquisition (Wasik, Bond, & Hindman, 2006).

To ensure excellent opportunities for preschool children to develop skills needed for future success, early childhood professionals must be equipped with the knowledge

base and evidence-based strategies that will bring about needed change (Dickinson & Brady, 2006). Acknowledging the broad continuum of experience and education brought to the preschool classroom, it becomes highly important to depend upon high quality, carefully constructed professional development opportunities to provide the dissemination, practice, and implementation of knowledge and skills necessary to improve literacy-related oral language abilities in students (Ramey & Ramey, 2008).

Despite evidence to prove its ineffectiveness (Guskey, 1986; Joyce & Showers, 2002), the traditional in-service training consisting of one-time workshops continues to be used. These trainings provide little or no ongoing feedback and support, failing to provide teachers with opportunities to reflect on their own practice and implementation of new skills in the classroom. Coaching has been shown to maintain a system of on-site support and feedback that can aid teachers in engaging in their own professional improvement, and is making its way into preschool programs, especially in the area of literacy instruction (Walpole & Meyer, 2008). Reflection, an ideal companion to any coaching model, should not be left behind in a professional development teacher training program. The reflective process aids in bridging the gap between research and practice (Cochran-Smith & Lytle, 1993; McLymont & Costa, 1998). Combined with the use of videotaped observations reflection has been shown to improve implementation of newly learned strategies and skills, and increase student outcomes. Unfortunately, videotaping is too often used only for supervisory critique or evaluation purposes. Researching effective aspects of professional development, especially those which produce lasting change in the classroom and which bring about desired learner outcomes (e.g., the teacher as learner, as well as the student), is time consuming and expensive. Nevertheless, there is a

need for this type of research (Guskey, 2003; Welch-Ross, Wolf, Moorehouse, & Rathgeb, 2006), as there is little evidence-based research supporting components of effective professional development (Winton, McCullum, & Catlett, 2008).

In conjunction with professional development training for improving teacher oral language interactions with students, and an expert coaching model, this study will look at the effects video self-observation and reflection will have on teacher implementation of strategies in the classroom and student outcomes.

## Research Questions

- How will the use of self-evaluation of classroom performance videotapes impact teacher implementation of the oral literacy development strategies of open-ended questions and expansions?
- To what degree will teacher use of open-ended questions and extensions generalize from small group to other classroom activities?
- How will teachers view self-evaluation in terms of (a) being an effective means of developing and practicing teaching strategies, (b) time efficiency: that is, time required for intervention does not outweigh the benefits, and (c) the ability to assess student verbal interactions and progress?
- How will student oral literacy abilities, specifically use of one word utterances, and words spoken per minute, change over the course of the study?

# CHAPTER 2

# METHODS

## Participants

### Teachers

The sample of teachers was drawn from those employed by a Head Start program serving three counties surrounding a western metropolitan area. Criteria for inclusion in the study were a) one or more years of preschool classroom lead teacher experience, b) professional credentials accepted by the hiring agency, c) two or more students with individualized education plans (IEP) in the classroom, and d) a willingness to participate. The program coordinator and education specialists identified a pool of potential teachers fitting these criteria. Teachers from this pool were then invited to participate. Those interested in joining the study were asked to provide signed consent. Teachers supplied demographic information (Table 1) and gave a summary of recent in-service trainings attended (Table 2). Participating teachers were also asked to complete the Teacher Initial Questionnaire, which contained 10 statements probing attitudes regarding emergent literacy skills and other classroom practices. Teacher responses are contained in Table 3.

### Students

Student participants included a group of four children drawn from within each of the six classrooms. Along with the teacher, this group was the focus in classroom

Table 1

Teacher Demographics

| Teacher | Years as Lead Teacher | Highest Level of Education | Highest Degree Earned | Licensure/ Credential |
|---|---|---|---|---|
| 1 | 17 | Some college | Associate | CDA* |
| 2 | 21 | Some college | Associate | CDA |
| 3 | 19 | Some college | Associate | CDA |
| 4 | 4 | Undergraduate degree | B.S. | none |
| 5 | 28 | Undergraduate degree | B.S. Early Childhood | none |
| 6 | 2 | Undergraduate degree | B.S. Psychology | none |

*CDA – Child Development Associate Credential

Table 2

Recent In-service Trainings

| Teacher | In-service Training within past 12 month* | | | | Follow-up Assistance/ Support for Training |
|---|---|---|---|---|---|
| | Teaching Math Concepts | Behavior Management | Emergent Literacy | Language Development | |
| 1 | 2-4 hours | 1 day | 1 day | 1 day | None |
| 2 | 2-4 hours | 1 day | 2-4 hours | 2-4 hours | None |
| 3 | 2-4 hours | 1 day | 1 day | 1 day | None |
| 4 | 2-4 hours | 2-4 hours | 2-4 hours | 2-4 hours | None |
| 5 | 2-4 hours | 1 day | 2-4 hours | 2-4 hours | None |
| 6 | 2-4 hours | 1 day | 2-4 hours | 2-4 hours | None |

*Training provided prior to study.

Table 3

Results of Initial Teacher Questionnaire

| Question: | Teacher: 1 | 2 | 3 | 4 | 5 | 6 | Group Average |
|---|---|---|---|---|---|---|---|
| 1. Emergent literacy skills are the most important early academic skills my students need to prepare for kindergarten. | 5 | 5 | 4 | 5 | 4 | 4 | 4.5 |
| 2. I spend much of my planning time preparing for ways to increase my students' abilities in emergent reading and writing. | 5 | 5 | 4 | 5 | 4 | 4 | 4.5 |
| 3. Most of the activities I plan involve pre-reading and pre-writing skills in some way. | 5 | 4 | 4 | 5 | 5 | 4 | 4.5 |
| 4. I spend more time than I would like on behavior management. | 4 | 5 | 4 | 5 | 3 | 3 | 4.0 |
| 5. Talking with my students is a good way to increase their emergent literacy skills. | 5 | 5 | 5 | 5 | 5 | 5 | 5.0 |
| 6. I try to converse with each student every day. | 5 | 5 | 5 | 5 | 5 | 5 | 5.0 |
| 7. I should spend lots of time talking with my students during activities. | 5 | 5 | 5 | 5 | 5 | 5 | 5.0 |
| 8. I would like to learn effective strategies for developing my students' oral language skills. | 5 | 5 | 5 | 5 | 5 | 5 | 5.0 |
| 9. Social skills are of higher priority in my classroom than emergent academic skills. | 4 | 5 | 5 | 5 | 4 | 4 | 4.5 |
| 10. As their teacher, I have a significant influence on the skills with which my students will enter kindergarten. | 5 | 5 | 5 | 5 | 5 | 5 | 5.0 |

1-Strongly Disagree 2-Slightly Disagree 3-No Strong Feelings 4-Slightly Agree 5- Strongly Agree

observations. The classroom teacher and researcher identified potential participants using the following criterion. Participants considered for inclusion in the study would be those with similar language concerns and demographic backgrounds. Other identifying criteria would include students that a) were likely to participate willingly, b) worked well with peers, c) had demonstrated regular attendance, and c) had parental approval/support. One of the selected student participants in each small group would have language related goals determined by an individualized education plan (IEP). Once possible student participants were identified, parents were informed of the nature of the study and their child's opportunity to participate. Parents willing for their child to participate were asked to provide informed consent.

## Setting

Head Start is a comprehensive child development program funded by the federal government for children birth to 5. Designed to meet the needs of low-income families, Head Start offers educational services and other supports for child and family wellbeing. The settings included in the study were limited to Head Start early childhood classrooms for children ages 3 to 5 years old. Children attended four mornings each week for approximately 4 ½ hours each day. Classrooms were located in community early childhood centers and elementary schools.

Observations conducted during the study took place during center time when the teacher and assistant teacher interacted with small groups of students. Activities observed were selected by the teachers to include those involving fine motor, object manipulation, or art projects done at a table.

## Measurement

### Dependent Variables

The first dependent measure for this study was the amount of change of teacher use of open-ended questions and expansions of student utterances. The second dependent measure was the assessment of the quality of each occurrence of these strategies. Classroom observations were videotaped during center time, with each teacher interacting with the same small group of students throughout the study. A 7-minute selection of the videotape was identified, beginning after the introduction to the activity was completed and the activity had begun. During baseline and subsequent phases either the researcher or a trained research assistant coded videotaped observations of 7 minutes duration. Event recording was used to count the number of occurrences of each target behavior. To determine the quality of each occurrence the observer used a rubric of strategy components for open-ended questions and expansions. During the Intervention Phase, following professional development training, only the researcher/coach had access to the data for each teacher for use in the coaching process.

In the Self-evaluation Phase, following training on self-evaluation, both the researcher/coach and the teacher individually analyzed videotaped observations. Both the coach/researcher and teacher used the Observation Checklist to record the frequency of use and quality of each strategy. A difference was that the researcher/coach reviewed all observations, while the teacher analyzed the final observation of each week. Generalization probes, beginning in the Intervention Phase, were conducted weekly during other classroom activities of large group circle time and mealtime. These probes

were analyzed for number of strategies used and strategy components by the researcher/coach and were not shared directly with the teacher.

## Independent Variables

**Professional development and coaching.** In anticipation of participating teachers having varying degrees of exposure to emergent literacy instruction (see Table 2), a half-day professional development training session for target teachers was conducted, beginning with an introduction to the theoretical framework of emergent literacy and its connection with oral language literacy. A brief discussion of risk factors for children from low income backgrounds and their influence on future reading achievement led to information on high quality preschools and quality teacher-child interactions. Instruction in the two selected strategies of open-ended questions and expansions included factors that determine the quality of implementation of each strategy, reinforced by demonstration of examples and nonexamples, and guided practice. Teachers were also instructed in technical issues related to a) the use of the video equipment, b) techniques for getting a good quality video, and c) electronic submission of videotaped observations.

To reinforce the transference of knowledge of the oral language skills strategies from the professional development experience to the classroom, a modified version of the coaching model outlined by Hanft, Rush, and Shelden (2004) for use in early childhood settings was utilized as follow-up. Teachers were instructed in the coaching model during the initial professional development training session. How it would be implemented, the coach's role and responsibilities, along with the teacher's role and responsibilities were explained at that time. Four components of this coaching process were used, to include 1)

introduction, 2) observation and preparation, 3) reflection, and 4) evaluation. Modifications from the Hanft et al. model include 1) the renaming of components of the coaching process to more accurately reflect intervention specifics, 2) predetermined learner outcomes rather than those jointly developed by the teacher and coach, 3) preparation for the coaching session, 4) weekly joint goal setting, and 5) a simplified evaluation process.

The introduction of the coaching model took place in both the professional development training session and in the first coaching session, establishing the framework for the coaching experience. The purpose of the coaching sessions and intended outcomes were discussed (Hanft et al., 2004). The observation and preparation components involved those things the coach and teacher would do prior to the coaching session. The coach observed all videotaped observations for each week and reviewed data collected either by herself or the research assistant on number of strategies used and components of the target behaviors. The coach made note of positive feedback to relate to the teacher during the coaching session, and identified areas needing improvement. The coach also listed ideas for remediation and/or improvement as needed to reference during the coaching session. The coach then determined if there was a further need for support, such as a demonstration or modeling of the strategies for the teacher (Hanft et al., 2004), and made necessary preparations for this. During the Intervention Phase the teacher was asked to prepare for the coaching session by reflecting on the implementation of the strategies during the week.

In the coaching session the coach's goal was to help enhance the teacher's perceptions by summarizing the impressions of the observations, and comparing goals

and actual results through the use of selected questions designed to facilitate deeper reflective thought (Hanft et al., 2004). The following questions and prompts were used to guide the coaching session.

- Please share your impressions of how this week went.
- What went well?
- Tell me how you worked on your goals this week.
- What were the results?
- What have you learned or noticed, either about yourself or your students?
- Where you would like to see improvement?
- What would you like to do differently this coming week?
- What goals should be considered for frequency and quality of both open-ended questions and expansions?

During the course of the discussion, guided by the above prompts, the coach provided verbal feedback on strategy implementation and gave recommendations for further improvement. The coach encouraged the teacher to specifically identify successful implementation of strategies. Jointly, as the coach and teacher discussed desired improvements, they set weekly target goals for the frequency and quality of each strategy. Following each coaching session the coach reviewed the effectiveness of the session by noting strengths and weaknesses of the session, identifying ways to improve, and determining progress made to achieve goals (Hanft et al., 2004).

**Self-evaluation training.** At the introduction of the Self-evaluation Phase, teachers individually participated in a training session on the self-evaluation process. Target strategies of open-ended questions and expansions were reviewed, including

strategy components. Teachers were instructed in a) the use of the Observation Checklist, b) identifying occurrences of target strategies on video and, c) technical issues pertaining to videotaping as needed. Demonstration and guided practice of these skills was given, along with individual practice where teachers viewed and recorded data from one or more of their own previous videotaped observations taken during the Intervention Phase of the study. Practice continued until at least 90% accuracy was reached on identification of both strategies. With the introduction of the self-evaluation process, the Self-evaluation Phase of the study required that the teacher observe the final videotaped observation of each week and follow a self-evaluation procedure in addition to ongoing reflection. Intervention Phase coaching techniques continued, with both the teacher and the coach separately observing the same videotape, and identifying and recording the number of strategies used along with strategy components. During the coaching session the results were compared and discussed. Any discrepancies in numbers of occurrences or components were discussed. This gave an informal opportunity to continue instruction in the identification and evaluation of each strategy should the need arise.

The Enhanced Coaching Phase was introduced when concerns arose about continued variable implementation of strategies, especially expansions. Enhanced Coaching included the addition of joint viewing of one videotape, and watching and critiquing selected video clips for each coaching session. A videotaped observation from the previous week was chosen to view together. The teacher identified the strategies used and the coach was able to point out any strategies that may have been overlooked. Ten video clips of expansions and six clips of open-ended questions were selected from a different video recorded in the previous week. These clips were chosen because they

provided an opportunity to practice one of the strategies in the context of classroom activities. The coach modeled a few examples of what OEQ or expansion could have been used for the first two video clips of each strategy. With the support of the coach, the teacher was then encouraged to give examples of OEQ or expansions that would be possible responses for the remaining clips.

### Student Measures

In determining the effects of the intervention on student oral literacy abilities, descriptive secondary data were compiled from weekly probes targeting the dependent variables of one-word utterances used and number of words spoken. Two students were selected from each small group to be followed throughout the study. One student had language-related IEP goals; the other did not have an IEP. To facilitate data collection these students sat beside the teacher during the observed activity to improve the video/audio capture of child responses. If seated at a table the teacher was instructed to position the student in such a way as to not be on the same side of the table as the teacher, but on the next side to allow easy face-to-face communication. Students alternated sitting beside the teacher, each doing so one day of each week with no stipulated order. Each observation for each of these two students would be analyzed.

## Interobserver Agreement

### Teachers

Research assistants were trained to identify the target behaviors of open-ended questions and expansions with an accuracy of not less than 90%. The research assistants observed all videotape segments and recorded the number of target behaviors used. The

research assistants were also trained to recognize the strategy components needed for the accurate implementation of each target behavior with an accuracy of not less than 90%. Using an assessment strategy known as discrete categorization (Kazdin, 1982), each occurrence of a target behavior was noted, along with the number of strategy components present. Exact times were noted in order to accurately compare the data. To determine interobserver agreement the researcher observed and collected data on the number of strategies and components used from a minimum of 25% of videotaped observations selected at random from all phases of the study, across all teachers. For the number of strategies used, event recording data from both observers was compared to determine point-by-point agreement, and then the percentage of agreement on the occurrence of open-ended questions and expansions was computed. This same method was used to determine interobserver agreement for strategy components. Agreement of 90% or above was desired for both the number of strategy occurrences and corresponding components.

**Students**

A research assistant was trained to identify the student target behavior of one-word utterances with an accuracy of not less than 90%. The research assistant observed all videotaped segments and recorded the number of one-word utterances. The research assistant also received training to calculate words spoken per minute. Following training, the accuracy of results from baseline observations was verified by the researcher. Periodic accuracy checks were made through all phases of the study on a minimum of 20% of videotapes. Accuracy of at least 90% was required, with retraining provided as necessary. To determine interobserver agreement the researcher observed and collected data on the number of one-word utterances from a minimum of 25% of videotaped

observations selected at random from all phases of the study and across all students. For interobserver agreement event recording data from both observers was computed to determine the percentage of agreement on the number of times the target behavior of one-word utterances was exhibited. As with measures of teacher use of strategies, point-by-point comparison was used to determine interobserver agreement. Agreement of 90% or above was desired between the research assistant and researcher.

## Design

A single subject design with a combination of multiple baselines across teachers and ABCD design (Kazdin, 1982) was used in this study to evaluate the effectiveness of the intervention package on teacher use of literacy-related oral language skills strategies in preschool settings. Single-subject design allowed experimental variables to be studied through comparing different phases of the study (Drew, Hardman, & Hosp, 2008). The multiple-baseline design allowed for the collection of data on more than one participant. The inclusion of ABCD design allowed the comparison of multiple treatments (interventions) within a single subject (Kazdin, 1982).

## Procedures

This study consisted of five phases, namely a) baseline, b) Intervention Phase, the implementation of the intervention package of professional development training on two oral literacy skills strategies and coaching, c) Self-evaluation Phase, continued implementation of the coaching intervention package with the addition of self-evaluation techniques, d) Enhanced Coaching Phase, the continuation of self-evaluation techniques

combined with enhanced coaching and e) Maintenance, weekly maintenance probes. Generalization probes were conducted through all phases.

## Research Approvals

Prior to contacting teachers for participation in the study, the research obtained approval from the University of Utah Institutional Review Board and Davis County Early Childhood Program, which oversees Head Start programs in Davis, Morgan, and Summit Counties. Following identification of a pool of teachers meeting criteria for inclusion in the study, teachers from this pool were contacted with an invitation to participate. Signed informed consent forms were collected from each participant. Following the receipt of consent forms, teachers participated in a preliminary assessment.

## Preliminary Assessment

**Teacher attitudes.** All teachers will not place the same value and emphasis on the development of oral language skills within their classroom. While controlling for this variable was not within the scope of the present study, acknowledging differences in teacher attitudes is important. To probe attitudes and priorities in their teaching practices, participants were asked to complete a Teacher Priorities questionnaire prepared for this use. Using a Likert scale format each teacher was able to indicate the importance he/she placed on literacy-related oral language development and other related topics.

## Baseline

Baseline data were gathered on all participants simultaneously through videotaped observations of a small group activity during center time. Teachers were responsible for videotaping all observations during baseline and throughout the study. This data was used

to determine the current use of target strategies along with predicting what strategy use would most likely be in the future. Generalization probes began during baseline. While it would have been preferable to allow all baseline data to become stable before proceeding, scheduling limitations required that all teachers participate in professional development training on oral literacy development strategies after only one week of baseline. This began the Intervention Phase.

**Intervention**

As pointed out, at the beginning of the Intervention Phase all teachers participated in a professional development training session on literacy-related oral language development and coaching. Teachers began videotaping observations twice weekly during a table activity. Weekly coaching sessions began at this time. With a lagged introduction, pairs of teachers then received training in self-evaluation and moved into the Self-evaluation Phase. Staggering exposure to this second intervention was designed to aid in demonstrating experimental control, with each new pair of teachers serving as the control for the previous pair (Drew et al., 2009). Continuing the same videotaping schedule, teachers began reviewing and evaluating one videotaped observation each week during the Self-evaluation Phase. They also continued to participate in weekly coaching sessions that included the addition of discussion about the videotape viewed and self-evaluated during the previous week.

To address the continued variable use of the targeted strategies, Enhanced Coaching with joint video review and guided practice with video clips was implemented. During this Enhanced Coaching Phase teachers continued to follow the videotaping

schedule, self-evaluate one videotape each week, reflect on progress, and participate in weekly enhanced coaching sessions.

Maintenance probes were conducted weekly as teachers completed the study and moved into the Maintenance Phase. Teachers entering the Maintenance Phase videotaped one small group activity each week. This observation included the same type of activity used in the Intervention Phases of the study (i.e., fine motor, object manipulation, or art project done at a table). Teachers were not required to view the video nor evaluate it. For those teachers ($n$=3) who entered the maintenance phase, probes continued until the end of the study.

**Generalization**

Generalization probes were done weekly, beginning with baseline and continuing throughout the study. The purpose for these probes was to assess the use of oral language development skills in settings other than the small group activities observed during center time. Settings for generalization probes included mealtime and the large group activity of circle time.

**Procedures for Students**

Data for selected students were gathered throughout baseline and all phases of intervention. The number of one-word utterances and words spoken were totaled. Both variables were converted into the form of a number per minute. The scores for each pair of children were averaged weekly, resulting in two data points each week, one for the average number of one-word utterances per minute and one for the total number of words spoken per minute.

## Social Validity

Social validation concerns the use of social criteria for the evaluation of the intervention, the procedures used, and the results of the intervention (Kazdin, 1982). Two levels of social validation were addressed in follow-up activities of the study. The first involves evaluation of the intervention itself. Central to this study was gaining an understanding of teacher perceptions of the usefulness and ease of implementing the intervention components, specifically, the observation of videotapes, self-evaluation methods, and coaching sessions. If teachers see a benefit in these methods, whether in being an effective way to develop and practice teaching strategies or in being worth the time expended for the results attained, then future use of these methods may be considered for other strategies and settings. To facilitate the collection of teacher perceptions, each participant was asked to complete a questionnaire consisting of questions using a Likert scale. Answers ranged from 1 (strongly disagree) to 5 (strongly agree).

The second level of social validation attended to at the completion of the study involved a subjective evaluation of teacher performance outcomes by the educational specialists in the Head Start program. These specialists, who interact regularly with the classroom teachers, completed a questionnaire composed of questions developed using a Likert scale with a range of 1 (strongly agree) to 5 (strongly disagree). The questions enabled the specialists to give an overall assessment of each teacher's oral language interactions with students at the close of the intervention.

# Data Analysis

## Teacher Data

Data were graphically displayed, including all phases of baseline and interventions. The use of graphs for the presentation of data serves a number of purposes. A graph facilitates a compact and detailed picture of the relationship between the variables of the study. Allowing for the independent evaluation of the data by individuals, a graph communicates the sequence of the experimental conditions, the amount of time taken for each phase, the independent and dependent variables and the experimental design. In addition, graphically displayed data facilitate a judgment about whether the requirements of the design have been met (Kazdin, 1982), with effective interventions being evident through a simple inspection of the data (Baer, 1977).

Data were graphed as experimental evaluation was conducted by visual examination of the data. Identification of a clear functional relationship was sought, represented by consistent, strong changes in the dependent variables of teacher use of open-ended questions and expansions and their accompanying components as they relate to the independent variables of professional development training in literacy-related oral language strategies with coaching and instruction in self-evaluation methods. The level, trend, and variability (or range) were examined before and after phase changes, as well as within and across phases. The immediacy of any effects and the overlap between phases were included in the analysis.

Interpretation of the results involved a number of steps. The first consisted of determining the size of change in teacher use of oral language strategies and its resultant applied significance. A second looked at the overall change in the use of the components

of these strategies across all phases of the study. Third, social validation of the intervention and effects/benefits per teacher perceptions were interpreted.

**Student Data**

As with the teacher data, visual analysis of student data was used. The level, trend, and variability (or range) were examined before and after phase changes, as well as within and across phases. The immediacy of any effects and the overlap between phases were included in the analysis. The results of the descriptive secondary data on students have the potential to support past research on the effectiveness of these teacher strategies. Influences such as the length of the study, varying levels of oral language skills, and teacher abilities to consistently use targeted strategies need to be considered in the interpretation as these may impact results.

# CHAPTER 3

# RESULTS

## Teacher Implementation of Oral Literacy Development Strategies

In order to determine the impact of self-evaluation of classroom performance on teacher implementation of the oral literacy development strategies of open-ended questions and expansion, each teacher videotaped two small group table activities each week from baseline through the Enhanced Coaching Phase. From these videotaped observations, data were collected on each open-ended question and expansion of a student's utterance used for all sessions.

### Open-ended Question Use

The number of open-ended questions (OEQ) observed for each session for all teachers is displayed graphically in Figure 1. Graphs for each teacher indicate the total number of OEQ used during each session of all phases of the study. The means of total OEQ observed for all phases are displayed in Figure 2.

Teacher 1 had a mean of 10.5 OEQ during baseline (range 9 to12), a mean of 16.33 (range of 11 to 24) OEQ for the Intervention Phase, a mean of 13.5 (range 5 to 22) for the Self-evaluation Phase, and a mean of 20.67 (range 16 to 24) during the Enhanced Coaching Phase. During Teacher 1's baseline a decelerating trend was indicated with moderate variability, continuing with a decelerating trend during the Intervention Phase

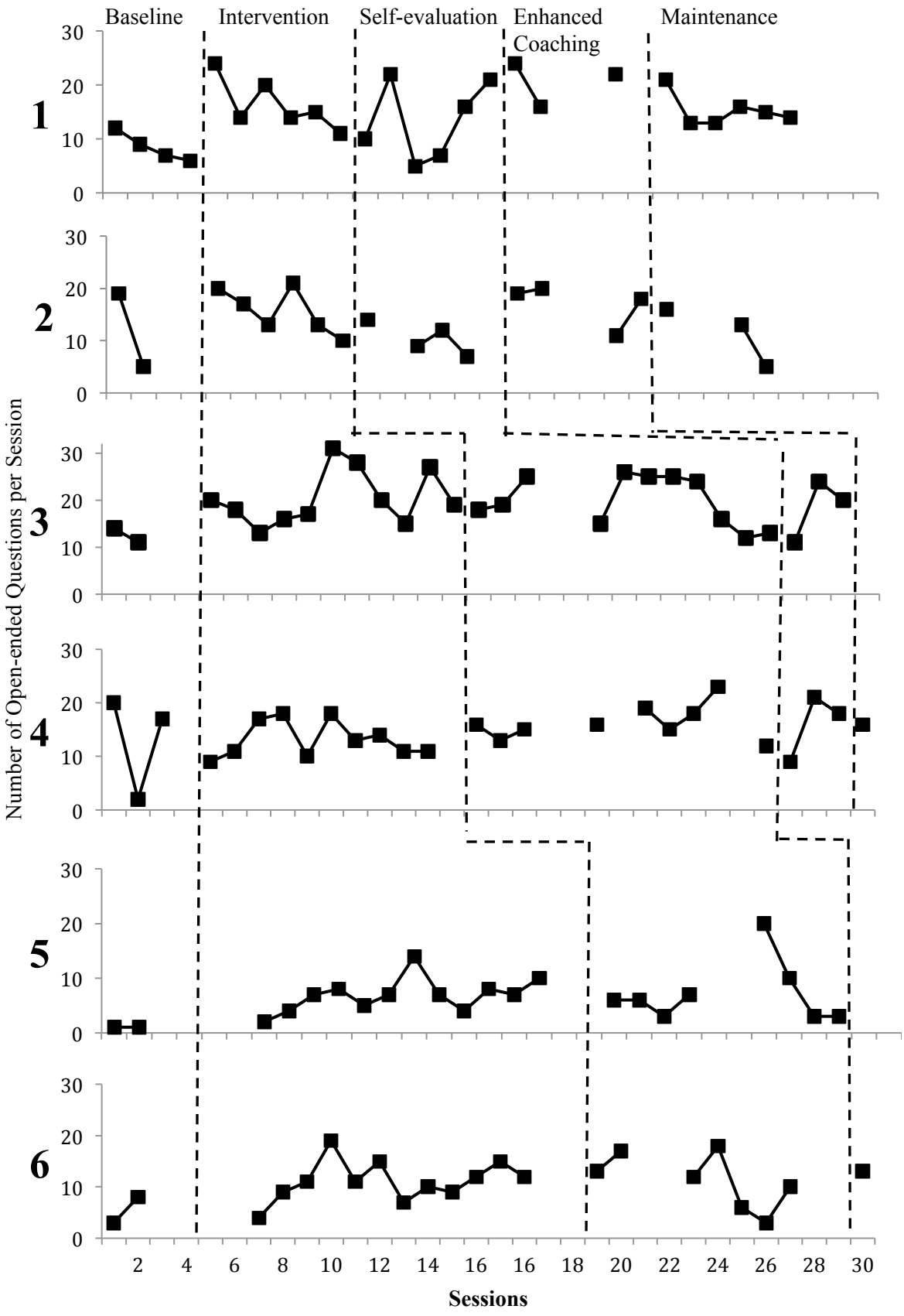


Figure 1: Open-ended Questions per Session

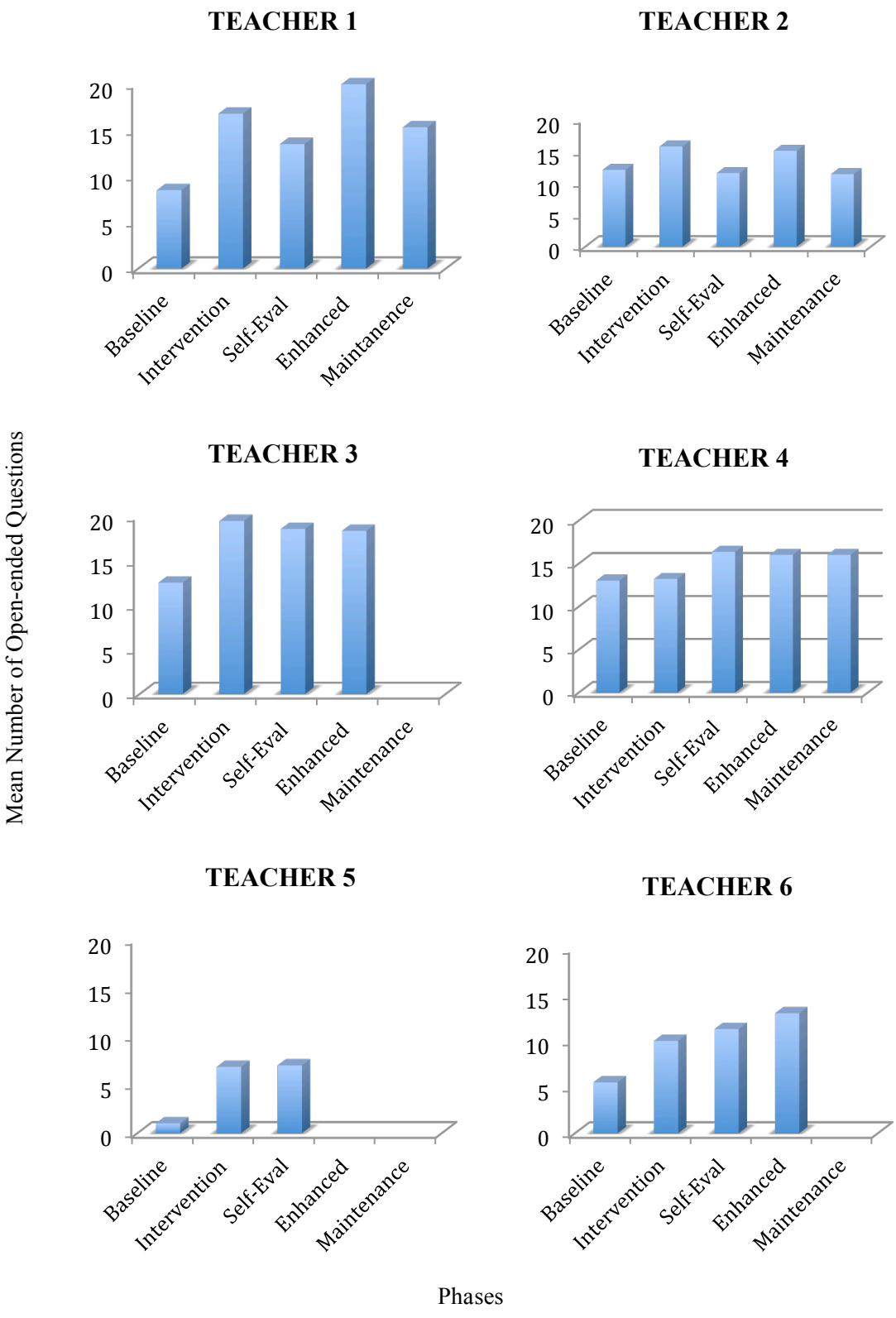


Figure 2: Phase Means for Open-ended Questions

with some variability. The Self-evaluation Phase demonstrated an accelerating trend with moderate variability, followed by a slightly decelerating trend during the Enhanced Coaching Phase. A significant level change was noted between baseline and the Intervention Phase. The beginning of the Maintenance Phase showed no level change and continued with a decreasing trend.

Teacher 2 had a baseline mean of 12 OEQ (range 5 to 19), an Intervention Phase mean of 15.67 (range of 10 to 21), a mean for Self-evaluation Phase of 11.50 (range 7 to 12), and a mean of 15 for the Enhanced Coaching Phase (11 to 20). During baseline a decelerating trend was noted with significant variability, followed by decelerating trends with some variability in Intervention, Self-evaluation, and Enhanced Coaching Phases. Moderate level changes were shown between baseline and the Intervention Phase, and between Self-evaluation and Enhanced Coaching Phases. No level change was noted entering the Maintenance Phase, followed by a decreasing trend.

Phase means for Teacher 3 included 12.50 OEQ (range 11 to 14) during baseline, 19.45 (range 13-31) during the Intervention Phase, 18.55 (range 12-26) for the Self-evaluation Phase, and a mean of 18.33 OEQ (range 11-24) for the Enhanced Coaching Phase. The trend for baseline was moderately decelerating, while Intervention, Self-evaluation, and Enhanced Coaching Phases showed an accelerating trend with moderate variability. Moderate level changes occurred between baseline and Intervention Phase, and between Self-evaluation and Enhanced Coaching Phases.

Teacher 4 had a baseline mean of 11 OEQ (range 2 to 20), an Intervention Phase mean of 13.20 (range of 18 to 21), a mean for Self-evaluation Phase of 16.33 (range 12 to 23), and a mean of 16 for the Enhanced Coaching Phase (9 to 21). Baseline showed a

significantly decelerating trend, followed by accelerating trends with some variability in Intervention, Self-evaluation, and Enhanced Coaching Phases. Moderate level changes were noted between baseline and Intervention, and between Self-evaluation and Enhanced Coaching Phases. Maintenance Phase consisted of one probe that showed no significant change from the previous phase.

Teacher 5 began with a baseline mean of 1 OEQ, an Intervention Phase mean of 6.85 (range of 2 to 14), and a mean of 7 (range 3 to 20) for Self-evaluation Phase. Baseline was stable, followed by a slightly accelerating trend with little variability during the Intervention Phase. The Self-evaluation Phase showed no level change but indicated a gradual decelerating trend. No significant level changes occurred.

Teacher 6 had a baseline mean of 5.5 OEQ (range 3 to 8), an Intervention Phase mean of 10 (range of 4 to 19), a mean for Self-evaluation Phase of 11.29 (range 3 to 18), and 13 OEQ for the single Enhanced Coaching Phase probe. The school year ended before additional data could be collected for Teacher 6. During baseline this teacher had the only accelerating trend, followed by an Intervention Phase with a flat trend with some variability. The Self-evaluation phase showed a slight increase in level with a decelerating trend.

The data representing the combined means for open-ended questions by phase for all teachers are contained in Figure 3. All teachers were found to use OEQ during baseline to varying degrees. The mean across all teachers was 8.75 (range1-12.5) with most using 10 to 12 OEQ per session. All teachers showed immediate increases in OEQ following the Oral Language Professional Development Training. One half of the teachers increased OEQ use during the Self-evaluation Phase. The Enhanced Coaching

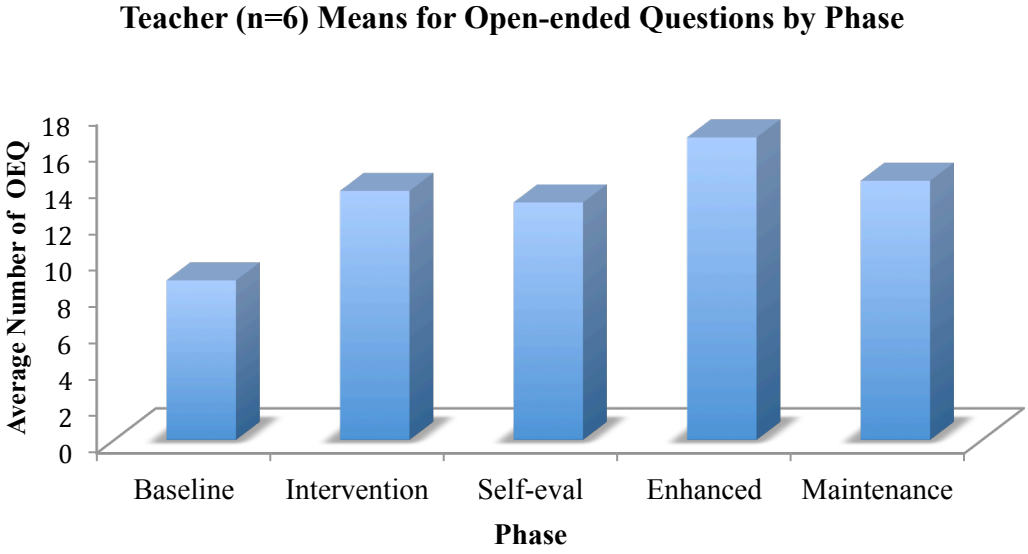


Figure 3: Teacher Means for Open-ended Questions by Phase

Phase saw all teachers remain the same or increase OEQ use compared to the previous phase. Those teachers from whom maintenance data were collected maintained levels of OEQ use at or above baseline measures, with most attaining 50% or greater increases over baseline rates.

**Expansion Use**

The number of times each teacher was observed to expand on a student utterance during each videotaped session is displayed graphically in Figure 4. Graphs for each teacher indicate the total number of expansions (EXP) used during each session of all phases of the study. The means of total EXP observed for all phases are displayed in Figure 5.

Teacher 1 had a baseline mean of 1 EXP (range 0 to 2), an Intervention Phase mean of .8 (range 0 to 3), a mean for Self-evaluation Phase of 1.17 (range 0 to 3), and a mean of 1.67 for the Enhanced Coaching Phase (range 0 to 3). During baseline a small decrease between baseline probes was noted, followed by a slight decelerating trend during intervention, a flat trend within the Self-evaluation Phase, and a slight accelerating trend in the Enhanced Coaching Phase. Level changes were minimal, with very low incidence of expansions.

Teacher 2 began with a baseline mean of 0.5 EXP (range 0 to 1), followed by an Intervention Phase mean of 1.0 (range of 0 to 2), a mean for Self-evaluation Phase of 2.5 (range 0 to 4), and a mean of 4.4 for the Enhanced Coaching Phase (3 to 7). A small decrease between baseline probes was present, followed by a flat trend with slight variability in the Intervention Phase. The Self-evaluation Phase showed a decelerating trend with some variability, and the Enhanced Coaching Phase indicated a significant

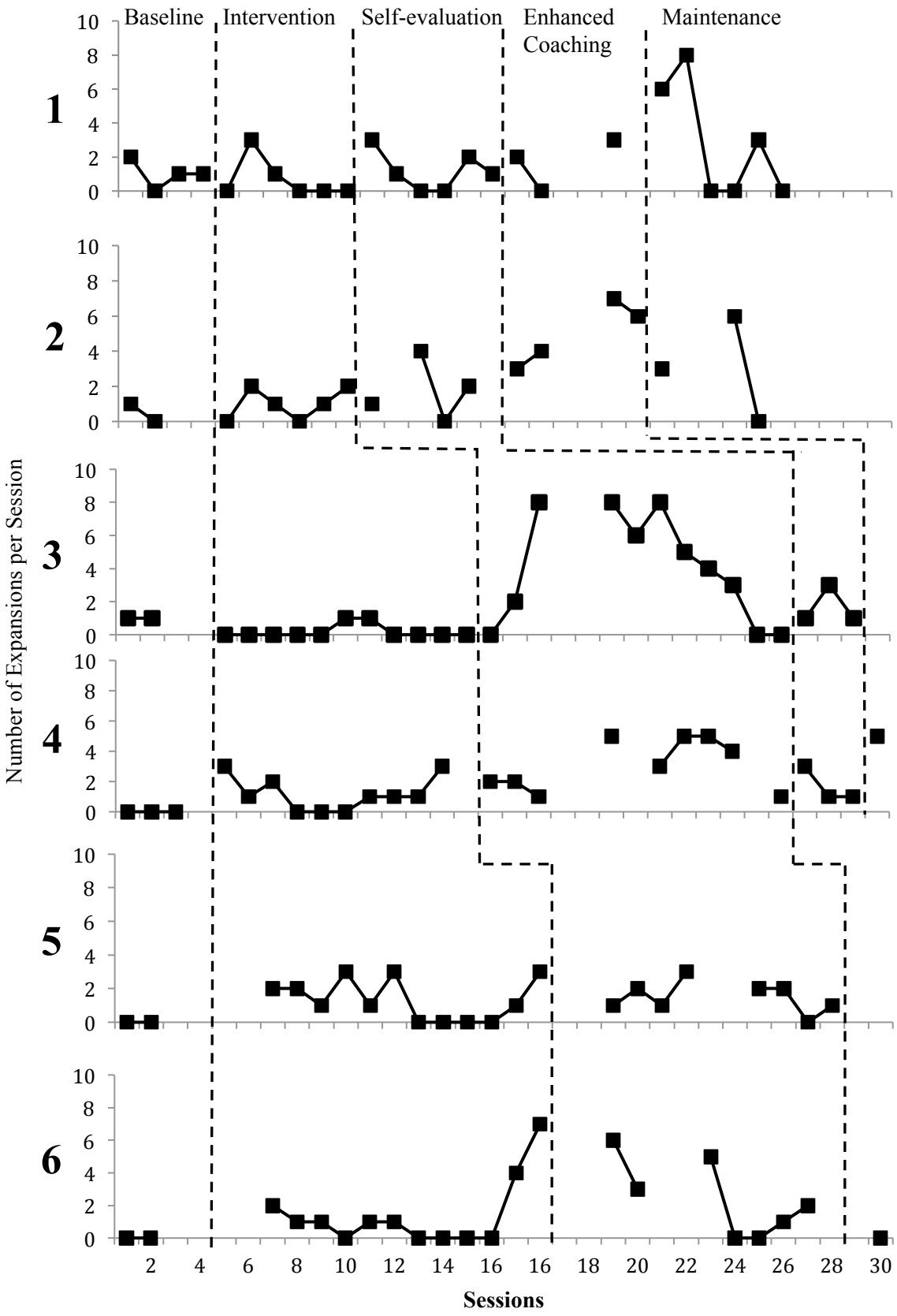


Figure 4: Expansions per Session

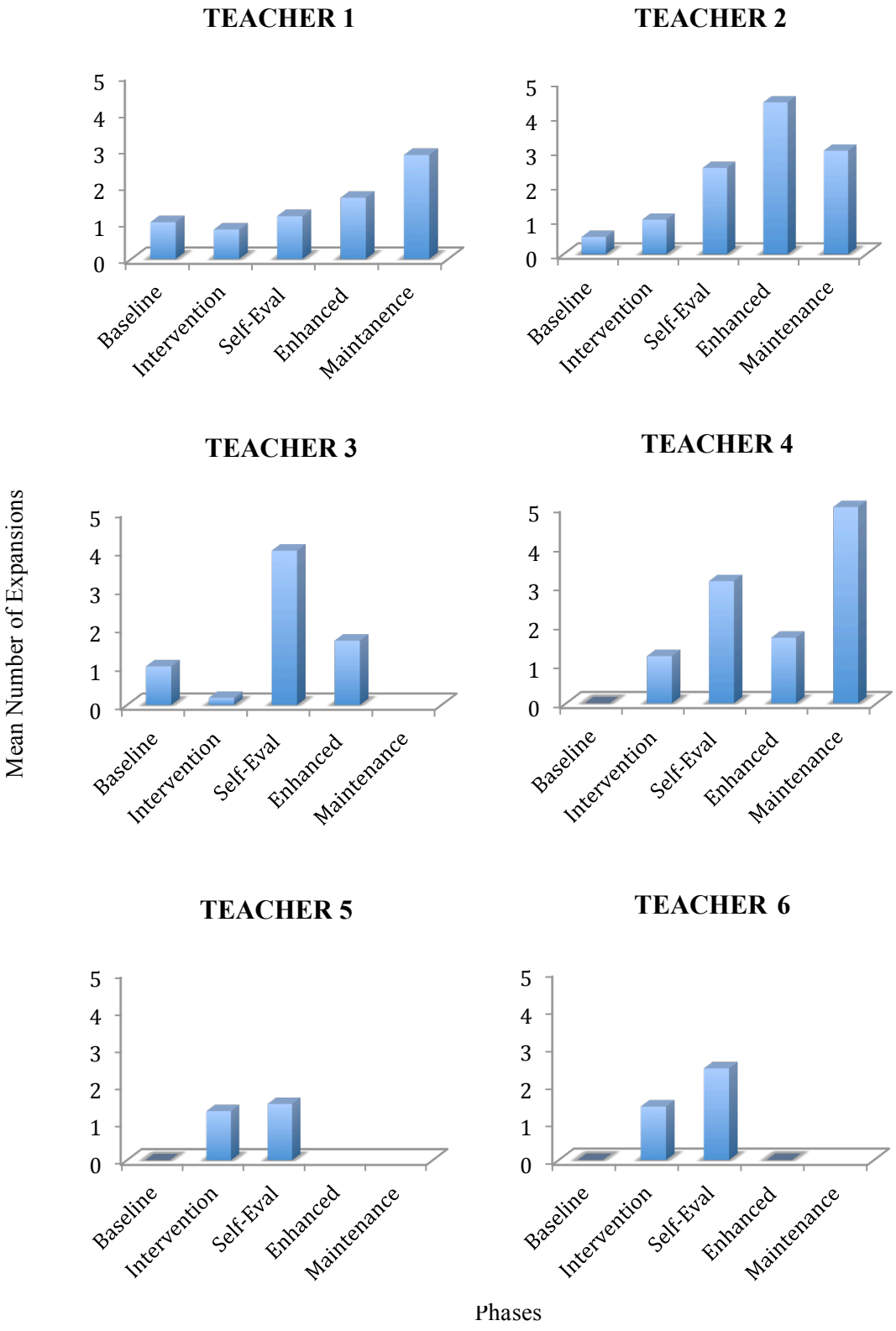


Figure 5: Phase Means for Expansions per Session

accelerating trend with little variability. Level changes of note occur between Intervention and Self-evaluation Phases, and between Self-evaluation and Enhanced Coaching Phases.

The baseline mean of expansions for Teacher 3 was 1, the Intervention Phase had a mean of 0.18 (range 0-1), the Self-evaluation Phase had a mean of 4 (range 0-8), and a mean of 1.67 was shown for the Enhanced Coaching Phase (range 1-3). Both baseline and the Intervention Phase were stable with little to no variability. A significant level change occurred between Intervention and Self-evaluation Phases with a strong upward trend at the beginning of the Self-evaluation Phase, followed by a decelerating trend. The Enhanced Coaching Phase was stable with little variability.

Expansion phase means for Teacher 4 included 0.0 for baseline, 1.2 (range 0-3) during the Intervention Phase, 3.11 (range 1-5) for the Self-evaluation Phase, and a mean of 1.67 (range 1-3) for Enhance Coaching Phase. Phase trends include no use of expansions in baseline probes, a slight accelerating trend in the Intervention Phase, continuing on to the Self-evaluation Phase where this accelerating trend becomes more pronounced. A moderate level change occurs between Self-evaluation and Enhanced Coaching Phases, where a decelerating trend follows.

Phase means for expansions for Teacher 5 comprise 0.0 for baseline, 1.31 (range 0-3) for the Intervention Phase, and 1.50 (range 0-3) for Self-evaluation Phase. While baseline was stable with no variability, both Intervention and Self-evaluation Phase present decelerating trends combined with moderate variability, with moderate level changes between all phases.

Teacher 6 had means of 0.0 for baseline, 1.42 (range 0-7) for the Intervention Phase, 2.43 (range 0-6) for Self-evaluation Phase, and 0.0 for Enhanced Coaching Phase. Starting with a stable baseline of no expansions, Intervention and Self-evaluation Phases had decelerating trends with significant level changes.

**Combined Teacher Means**

Combining phase means of expansions for all teachers displayed in Figure 6 provide a graphic overview of the results of each phase. Baseline data showed that one half of the teachers used no expansions at the beginning of the study, with the other half using an average of one or fewer expansions per session. The majority of teachers demonstrated an increase in expansions following the initial training and during the Intervention Phase. With the inclusion of self-evaluation training and weekly self-evaluation opportunities all teachers made gains in expansion use. The implementation of enhanced training and enhanced coaching methods brought about variable outcomes teacher to teacher, with cumulative expansions decreasing during this phase. Those teachers continuing into the Maintenance Phase (n=3) maintained increases over baseline, Intervention, and Self-evaluation Phases.

**Implementation of Strategy Components**

Each occurrence of an open-ended question was analyzed for the components of (a) gaining student attention, (b) having no right or wrong answer, and (c) waiting 3 seconds for a response. The percentages of OEQ with all components in each phase are displayed in Table 4. During baseline all teachers demonstrated low levels of OEQ containing all three components (range 0 – 36%). During the Intervention Phase 5 of 6

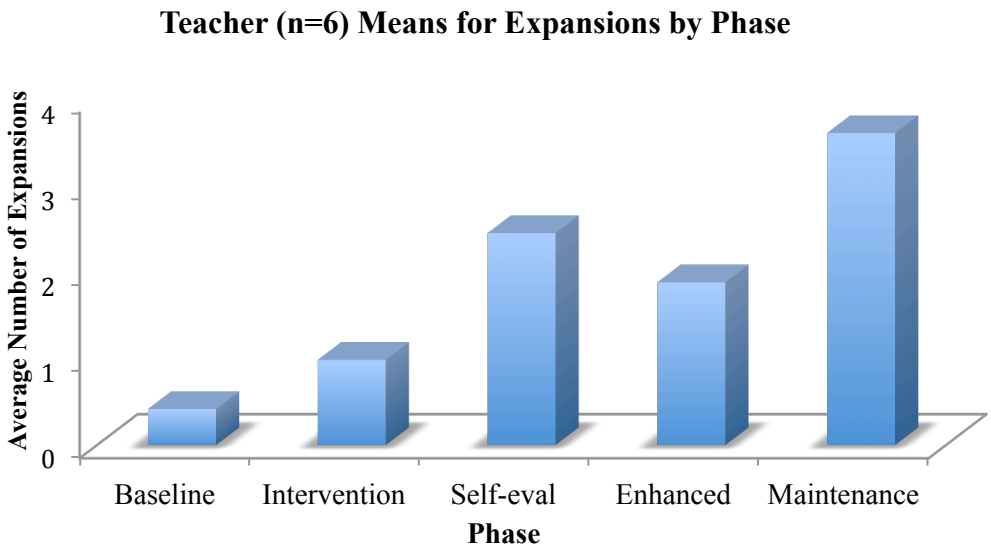


Figure 6: Teacher Means for Expansions by Phase

Table 4

Implementation of Open-ended Question Components

| | Teacher 1 | Teacher 2 | Teacher 3 | Teacher 4 | Teacher 5 | Teacher 6 |
|---|---|---|---|---|---|---|
| Gain Attention: | | | | | | |
| Baseline | .00 | .42 | .24 | .45 | .00 | .36 |
| Intervention | .37 | .57 | .68 | .24 | .47 | .49 |
| Self-evaluation | .52 | .57 | .62 | .45 | .43 | .48 |
| Enhanced Training | .76 | .57 | .53 | .77 | - | .62 |
| Maintenance | .27 | .41 | * | .50 | - | - |
| No right or wrong answer: | | | | | | |
| Baseline | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Intervention | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Self-evaluation | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Enhanced Training | 1.00 | 1.00 | 1.00 | 1.00 | - | 1.00 |
| Maintenance | 1.00 | 1.00 | * | 1.00 | - | - |
| Wait time (3 seconds): | | | | | | |
| Baseline | .76 | .63 | .80 | .41 | .50 | .82 |
| Intervention | .75 | .73 | .88 | .72 | .68 | .69 |
| Self-evaluation | .61 | .87 | .75 | .44 | .61 | .75 |
| Enhanced Training | .65 | .57 | .78 | .85 | - | .69 |
| Maintenance | .74 | .94 | * | .81 | - | - |
| All Indicators Present: | | | | | | |
| Baseline | .00 | .33 | .12 | .05 | .00 | .36 |
| Intervention | .31 | .49 | .55 | .23 | .28 | .34 |
| Self-evaluation | .36 | .48 | .56 | .28 | .29 | .35 |
| Enhanced Training | .52 | .48 | .42 | .65 | - | .54 |
| Maintenance | .19 | .38 | * | .38 | - | - |

(-) indicates all sessions within a phase containing no open-ended questions (*) indicates no sessions within a phase

teachers increased the use of all components in OEQ by 16 to 43 percentage points (range 23 to 55%). During the Intervention and Self-training Phases small differences were found (range 1 to 5 percentage points). With the Enhanced Coaching Phase half of the teachers improved their use of OEQ with all components, with increases of 19 to 37 percentage points (range 52 to 65%).

The data concerning individual components indicate that having no right or wrong answer was always present, being present 100% of the time. The component of gaining student attention was not present in baseline probes for Teachers 1 and 5, with the other teachers ranging from 24 to 45%. The Intervention Phase showed increases of between 15 and 47 percentage points for all teachers but one (range 37 to 68%). The majority of teachers maintained the same amount of attention gaining during the Self-evaluation Phase, while two teachers increased from 11 to 15 points (range 45 to 52%). Of those teachers with videotaped observations during the Enhanced Coaching Phase (5 of 6), three continued to increase attention, gaining between 14 and 24 percentage points.

Each expansion was examined for the components of (a) the inclusion of 2 to 4 words added to the child's utterance, (b) recasting the utterance to correct errors in syntax and grammar, and (c) providing positive reinforcement or feedback. The results have been included in Table 5.

Data for the component of recasting indicate that this area was a strength for all teachers. Teachers recast as necessary 100% of the time across all phases, including maintenance probes. Conversely, providing positive reinforcement and/or feedback appeared to be the most difficult for teachers to include in expansion. With the exception of Teacher 1, all other teachers provided little to no positive reinforcement in the

Table 5

Implementation of Expansion Components

| | Teacher 1 | Teacher 2 | Teacher 3 | Teacher 4 | Teacher 5 | Teacher 6 |
|---|---|---|---|---|---|---|
| Expansion of 2-4 words: | | | | | | |
| Baseline | .00 | 1.00 | 1.00 | - | - | - |
| Intervention | .75 | .33 | .00 | .50 | .76 | .71 |
| Self-evaluation | .71 | .60 | .73 | .46 | .82 | .59 |
| Enhanced Training | .80 | .73 | .20 | .40 | - | - |
| Maintenance | .76 | .89 | - | .40 | * | * |
| Recast/Recast not needed: | | | | | | |
| Baseline | 1.00 | 1.00 | 1.00 | - | - | - |
| Intervention | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Self-evaluation | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Enhanced Training | 1.00 | 1.00 | 1.00 | 1.00 | - | - |
| Maintenance | 1.00 | 1.00 | - | 1.00 | * | * |
| Positive Reinforcement/Feedback: | | | | | | |
| Baseline | 1.00 | .00 | .50 | - | - | - |
| Intervention | .75 | .00 | .00 | .17 | .00 | .36 |
| Self-evaluation | .29 | .00 | .05 | .07 | .00 | .24 |
| Enhanced Training | .20 | .23 | .00 | .20 | - | - |
| Maintenance | .29 | .22 | - | .20 | * | * |
| All Indicators Present: | | | | | | |
| Baseline | .00 | .00 | .50 | - | - | - |
| Intervention | .75 | .00 | .00 | .08 | .00 | .24 |
| Self-evaluation | .14 | .00 | .14 | .04 | .00 | .18 |
| Enhanced Training | .20 | .18 | .00 | .20 | - | - |
| Maintenance | .29 | .22 | - | .00 | * | * |

(-) indicates all sessions within a phase containing no expansions (*) indicates no sessions within a phase

Intervention, Self-evaluation, Enhanced Coaching, and Maintenance Phases (range 0.00-36%). Teacher 1 showed strong use of positive reinforcement for baseline and Intervention Phases, and then dropped to where the others were performing.

Due to the low numbers of expansions and the low incidence of positive reinforcement, data for expansions with all indicators present was equally low. With the majority of teachers, expansions using all components were near or below one quarter of the time (range 0-29%) across all phases.

In summary, OEQ phase means for 5 of the 6 participating teachers showed increases over baseline probes in all subsequent phases. The remaining teacher maintained or increased phase means when compared with baseline. An average mean increase of 4.0 (range 3.7 – 6.95) between baseline and the Intervention Phase was shown. The Self-evaluation Phase showed varying results, with half of the teachers displaying increases over the Intervention Phase mean and half showing decreases in means. The Enhanced Coaching Phase, likewise, showed varying results, half increasing the use of OEQ and half decreasing OEQ. For those participants with probes taken during the Maintenance Phase, one teacher maintained the previous mean, while the other two showed a decrease in OEQ usage.

Starting with an average mean of less than one half of an expansion for all teachers (range 0-1), two thirds of the participants saw increases in means for the Intervention Phase. All teachers showed increases in means during the Self-evaluation Phase. Enhanced Coaching Phase results showed two teachers continuing to increase expansions. Other results were variable.The data set indicating the use of components associated with OEQ and expansions shows great variability for most components.

Recasting during expansions and having no right or wrong answer when asking an OEQ were present 100% of the time in their respective strategies. The components for OEQ were used more readily than those of expansions, this fact being supported by the higher percentages of OEQ being asked with all components present after baseline phase. Across all teachers and phases other than baseline, OEQ with all components averaged 40.4% (range 23-65%). Average expansions used, containing all components, across teachers and phases after baseline was 14% (range 0-75%).

With later phases of the study showing increases of OEQ and expansions, a next point of interest was to document the impact of the acquisition of these skills on generalization of these strategies to other classroom activities.

## Generalization of Strategies

In addition to the two observations each teacher videotaped weekly during small group table activities, they also videotaped a mealtime and a circle time. Mealtime was chosen because it is less structured while still retaining a small group setting. Circle time provided the opportunity to deviate from the small group atmosphere to include the entire class. Data representing the degree to which teachers generalized the use of the oral literacy development strategy of open-ended questions is displayed in Figures 7 and 8. Information on expansions is displayed in Figures 9 and 10.

Generalization of the use of OEQ in mealtime settings across phases had varying results, with the majority of teachers (4 of 6) ending their final phase at levels above that of baseline. Data representing the extent that OEQ generalized to large group circle time

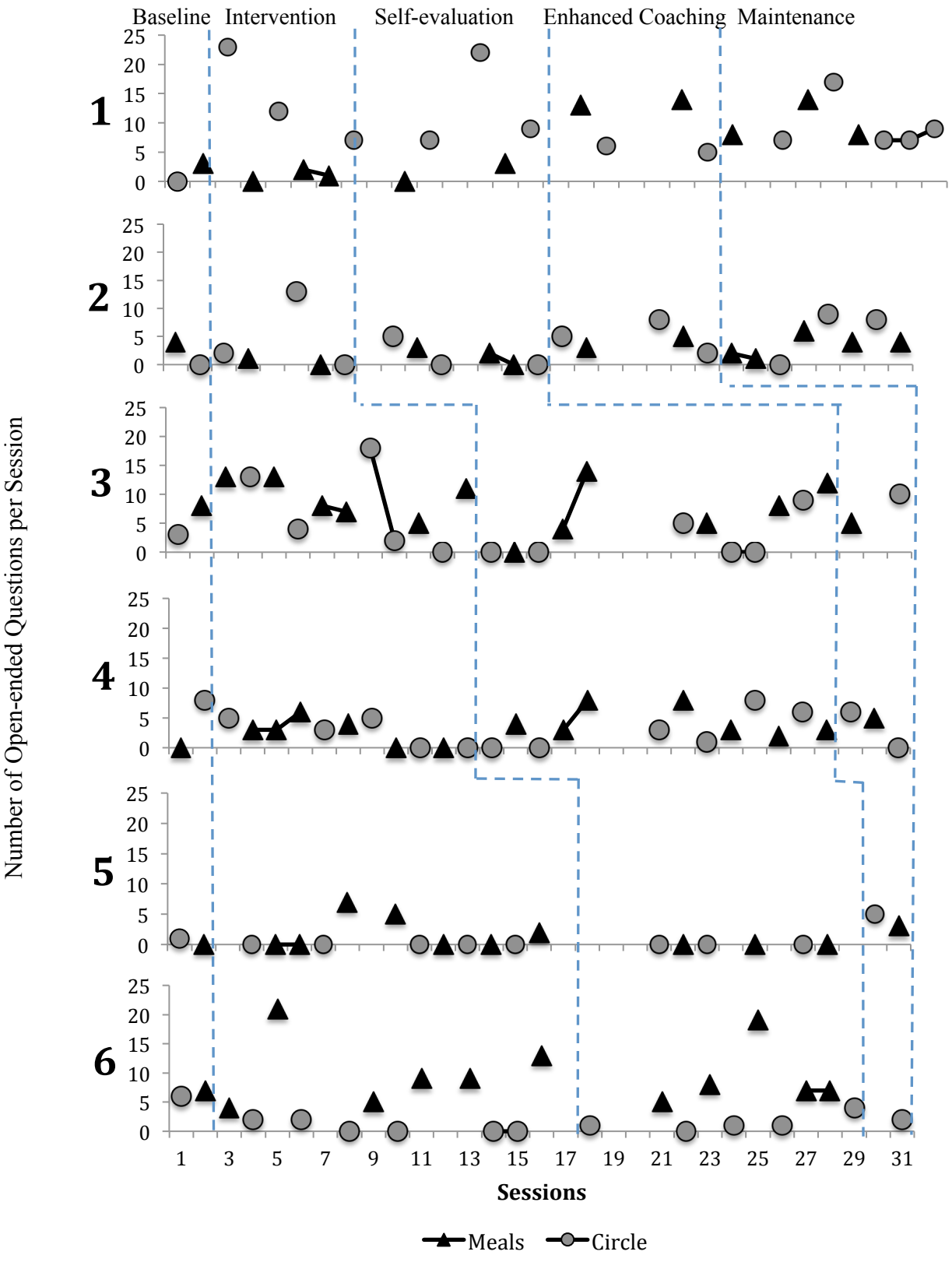


Figure 7: Generalization of Open-ended Questions to Mealtime and Circle Time

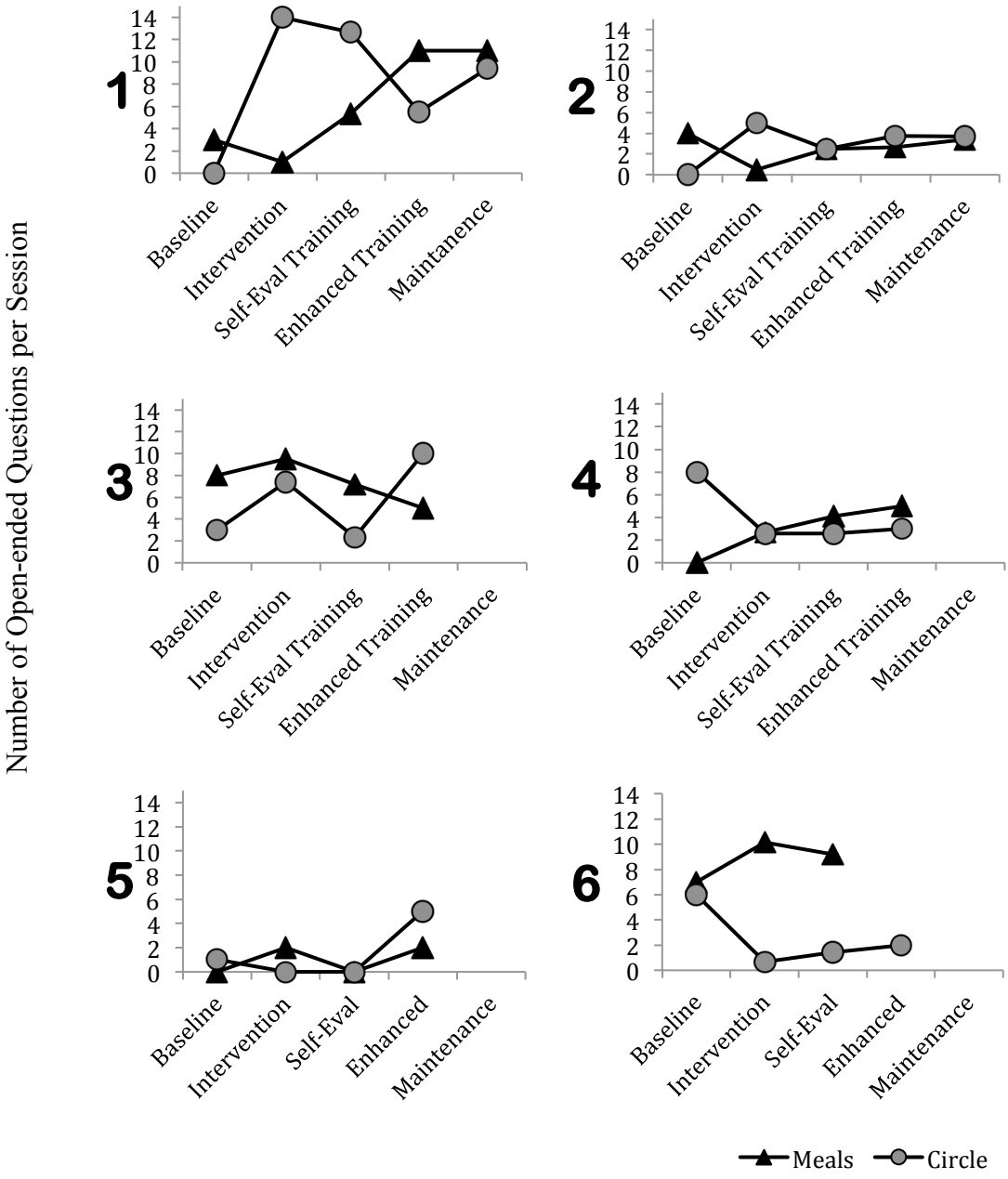


Figure 8: Generalization Phase Means for Open-ended Questions

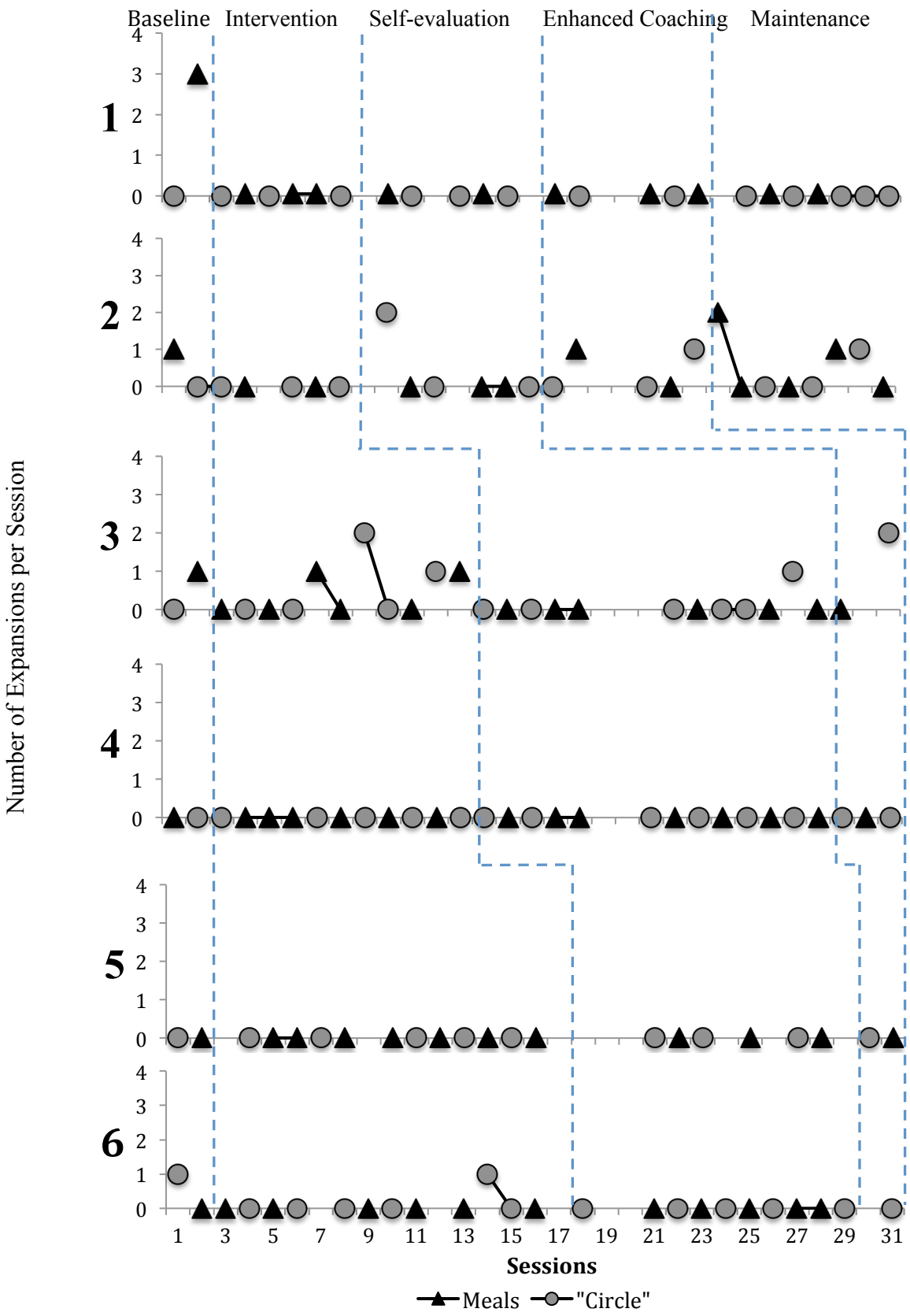


Figure 9: Generalization of Expansions to Mealtime and Circle Time

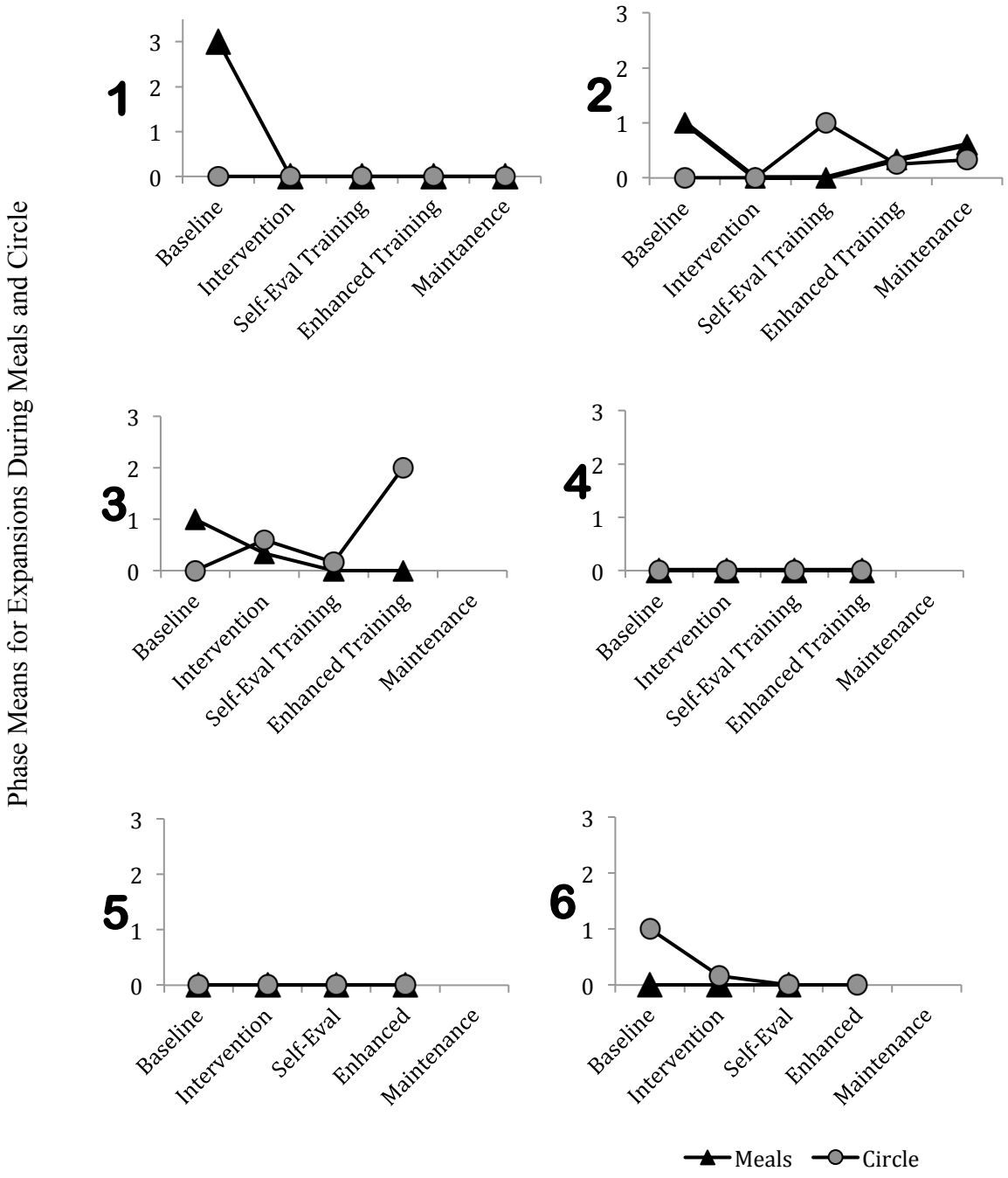


Figure 10: Generalization Phase Means for Expansions

showed that the majority of teachers (4 of 6) increased their usage over the number observed in the initial baseline probe.

When observing the generalization of expanding on a child's utterance during mealtime and circle time, the data found in Figures 7 and 8 show a distinct contrast between this strategy and that of OEQ. Mealtime means show few or no expansions being used across all phases of the study for all teachers. Likewise, circle time produced only an occasional expansion. While Teacher 2 attained a mean of 2 during the Enhanced Coaching Phase, half of the teachers had means of zero throughout all phases of the study. This same lack of expansions is consistent with the small number of expansions used in small group table activities.

## Teacher Views of Self-evaluation

At the conclusion of the study teachers were asked to complete a final questionnaire with the purpose of anonymously expressing their views on the (a) usefulness of the coaching and self-evaluation model, (b) ease of implementing the model, (c) effectiveness of the model in developing and practicing teaching strategies, (d) whether the extent of effort put forth was worth the results, and (e) extent to which their ability to assess student verbal interactions and progress improved. The results of this anonymous questionnaire are found in Table 6.

The questionnaire included 11 statements and teachers were asked to indicate the degree to which they agreed with each statement. A 5-point Likert Scale was used. Answers of 1, indicating strong disagreement, to 5, indicating strong agreement, were averaged between all teachers that returned the questionnaire (n=5). The statement receiving the highest average score (4.8, range 4-5) indicated that teachers found

Table 6

Results of Final Teacher Questionnaire

| Question: | Teacher: A | B | C | D | E | F | Group Average |
|---|---|---|---|---|---|---|---|
| ***Usefulness:*** | | | | | | | |
| 1. The coaching sessions helped to improve my skills in using open-ended questions and expansions. | 5 | 3 | 3 | 5 | 3 | - | 3.8 |
| 2. Watching and evaluating me interacting with my students was a useful way to improve my use of oral language development strategies. | 5 | 5 | 5 | 5 | 4 | - | 4.8 |
| 3. The coaching and self-evaluation method would be useful in developing other strategies to use in my classroom. | 5 | 3 | 4 | 5 | 4 | - | 4.2 |
| ***Ease of Implementation:*** | | | | | | | |
| 4. Once my students and I were used to the process, videotaping was uncomplicated. | 4 | 3 | 4 | 3 | 4 | - | 3.6 |
| 5. Evaluating my observations was a simple procedure. | 4 | 3 | 4 | 4 | 2 | - | 3.4 |
| ***Effectiveness in developing and practicing teaching strategies:*** | | | | | | | |
| 6. Coaching and self-evaluation were effective in helping me to develop my skills. | 5 | 2 | 3 | 5 | 3 | - | 3.6 |
| 7. Having a coach to assist me as I practiced the strategies I learned in professional development in my own classroom was effective. | 5 | 2 | 3 | 5 | 4 | - | 3.8 |
| ***Worth Time Expended:*** | | | | | | | |
| 8. Videotaping was not overly time-consuming. | 5 | 2 | 2 | 3 | 1 | - | 2.6 |
| 9. Overall, the time I spent in videotaping and self-evaluating my interactions with my students was worthwhile. | 5 | 4 | 4 | 5 | 4 | - | 4.4 |
| ***Student Interactions and Progress:*** | | | | | | | |
| 10. Self-evaluating videotapes of classroom activities helped me assess student verbal interactions more effectively. | 5 | 4 | 4 | 5 | - | - | 4.5 |
| 11. Self-evaluation videotapes of classroom activities helped me assess student progress more effectively. | 4 | 3 | 4 | 4 | - | - | 3.8 |

1-Strongly Disagree 2-Slightly Disagree 3-No Strong Feelings 4-Slightly Agree 5-Strongly Agree

watching and evaluating themselves interacting with their students was a useful way to improve their use of oral language development strategies. The statement receiving the second highest score (4.5, range 4-5) suggested that teachers felt the self-evaluation process allowed effective assessment of student verbal interactions. Another high scoring statement of 4.4 (range 4-5) showed that overall, the time teachers spent in videotaping and self-evaluation their interactions with students was worthwhile. A last high scoring statement of 4.2 (range 3-5) found that teachers felt the coaching and self-evaluation method would be useful in developing other strategies in their classrooms.

The statement receiving the lowest score reflected teacher concerns over issues of time usage. With a score of 2.6 (range 1–5) teachers had widely varying scores on the statement: Videotaping was not overly time-consuming.

The results discussed and the full data contained in the table seem to indicate that teachers felt the coaching and self-evaluation model provided a useful way to improve the targeted strategies for oral language development and also could provide an effective way to develop other classroom strategies. The ability to monitor and assess student verbal interactions was found by most teachers to be another positive point for the coaching and self-evaluation model. Issues relating to the amount of time needed for videotaping and coaching sessions appeared to be concerns for some teachers.

## Student Oral Literacy Abilities

Two target students were selected from each classroom group of participating students before the start of the study. Data were collected on each target student from one videotaped observation of a small group table each week. Students were designated by two numbers, the first being the teacher's number (1 through 6) and the second a student

number of 1 or 2. Data for each student were collected to include the number of one-word utterances and the number of utterances that contained two or more words per session. These data are found in Figure 11. Figure 12 displays the percentage of utterances with two or more words from all utterances used in each session. The mean length of utterance (MLU) for each student is shown session by session in Figure 13.

Data for Student 1-1 showed a decrease over the course of the study in the number of one-word utterances and a corresponding increase in the percentage of utterances of two or more words. There was a gradual increase in MLU. Student 1-2 showed a sharp decrease in one-word utterances once intervention began, which continued throughout the study. The MLU for Student 1-2 increased through Maintenance Phase and the percentage of utterances containing more than one word increased slightly.

A slight increase in one-word utterances was seen in data for Student 2-1, along with a variable MLU reflecting little to no change from baseline. Utterances of two words or more increased throughout the study. Student 2-2 appeared to use slight more one-word utterances as the study progressed, with utterances of more than one word remaining at or below baseline numbers.

Data for Student 3-1 presented slight increases in the number of one-word utterances, variable MLU with little or no perceivable change from baseline, and percentages of utterances of two or more words remaining similar to baseline throughout the study. Data for Student 3-2 showed variable numbers of one-word utterances with most sessions being at or below baseline. A clear increase in MLU and use of utterances of two or more words were demonstrated through all phases of the study.

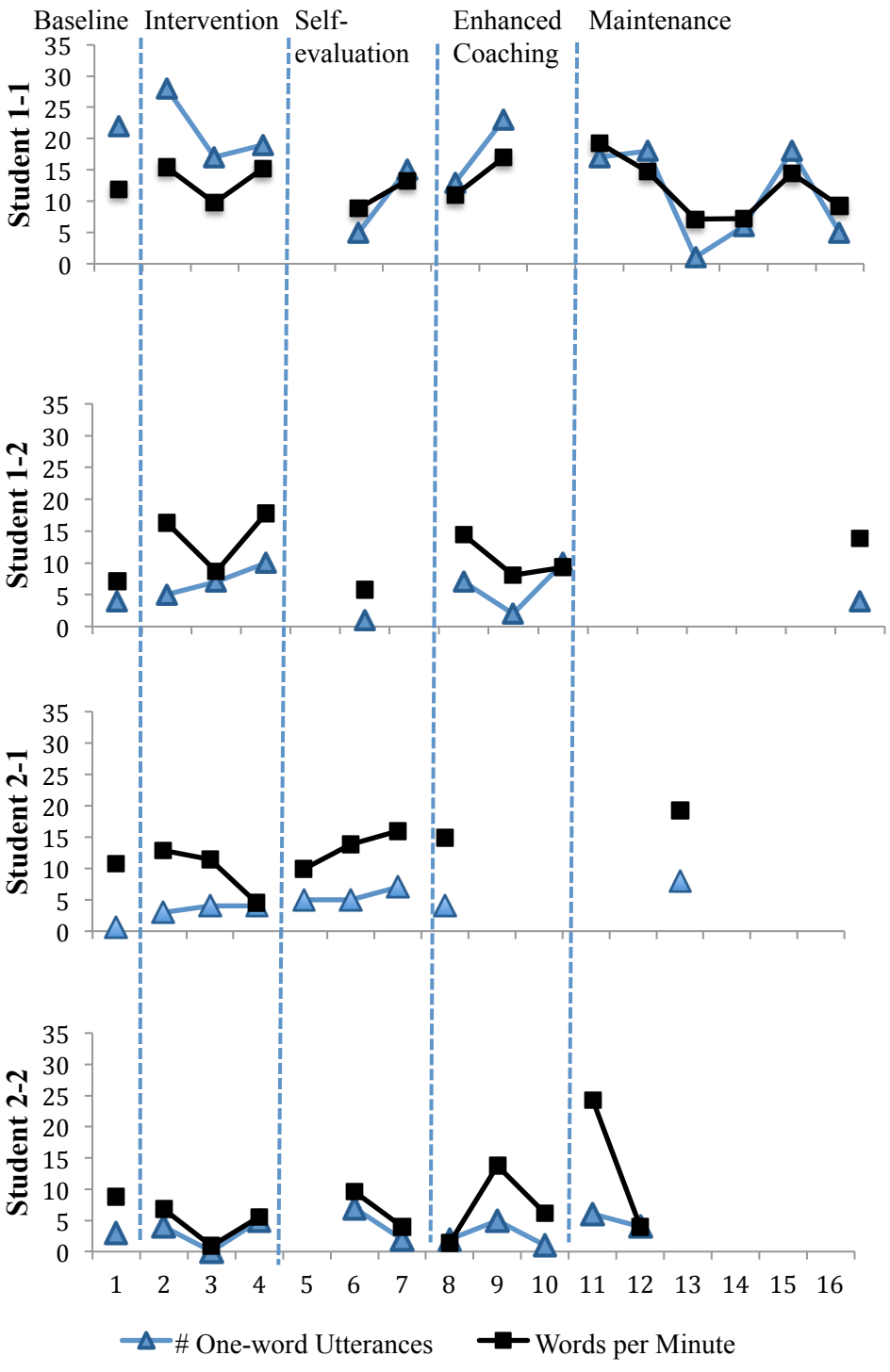


Figure 11: Student Data: Number of One-word Utterances and Words per Minute per Session

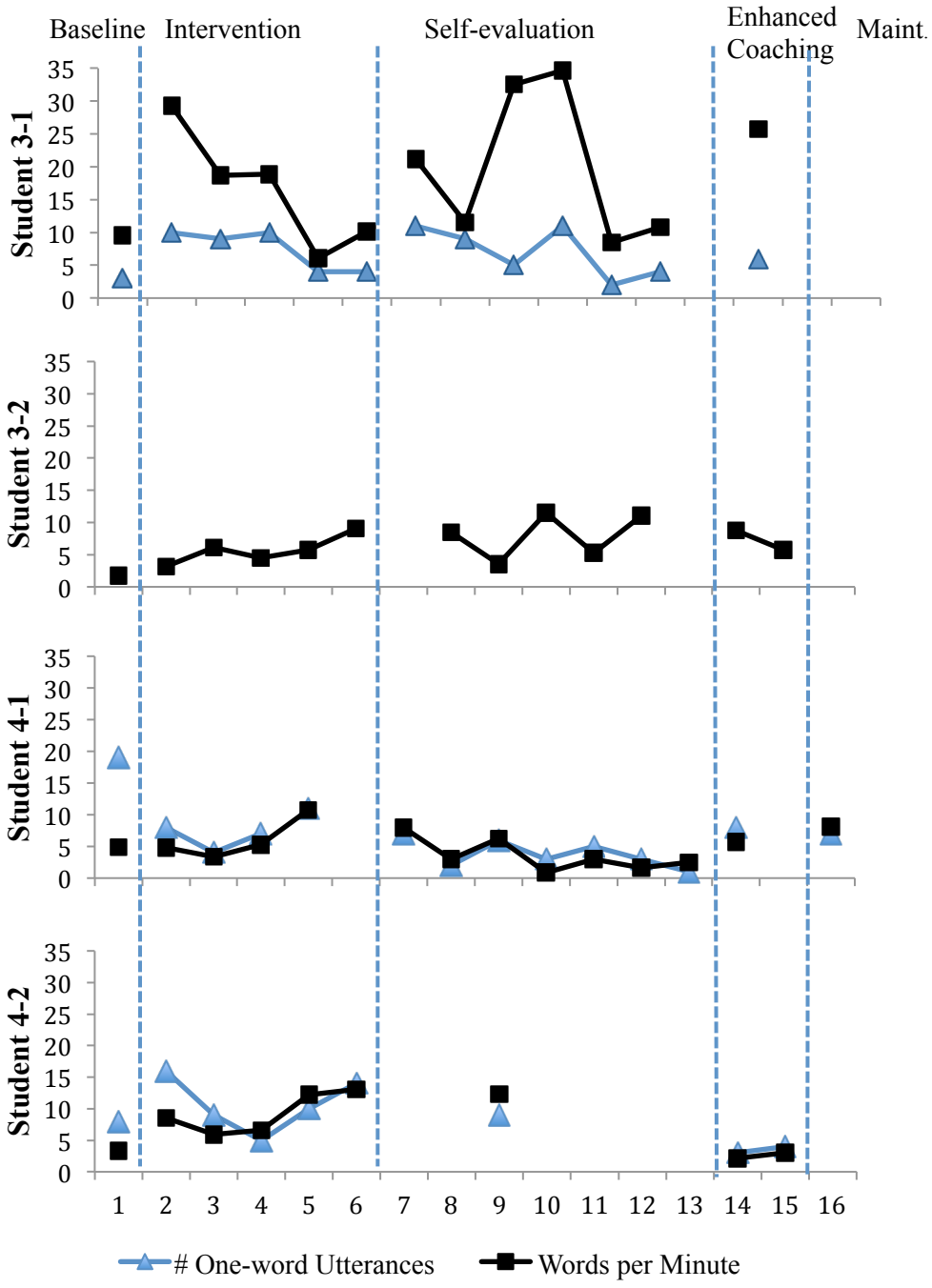


Figure 11 cont.

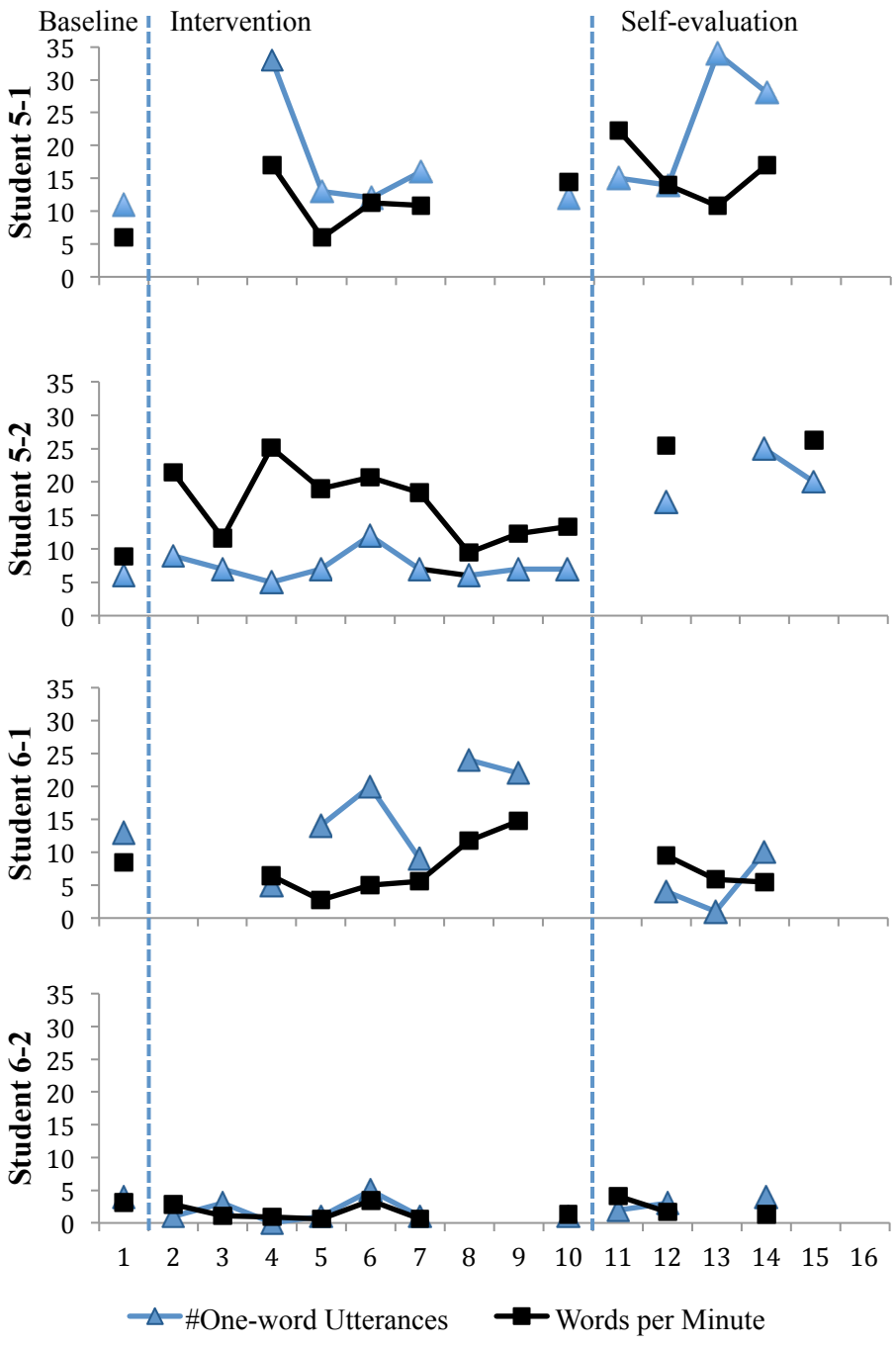


Figure 11 cont.

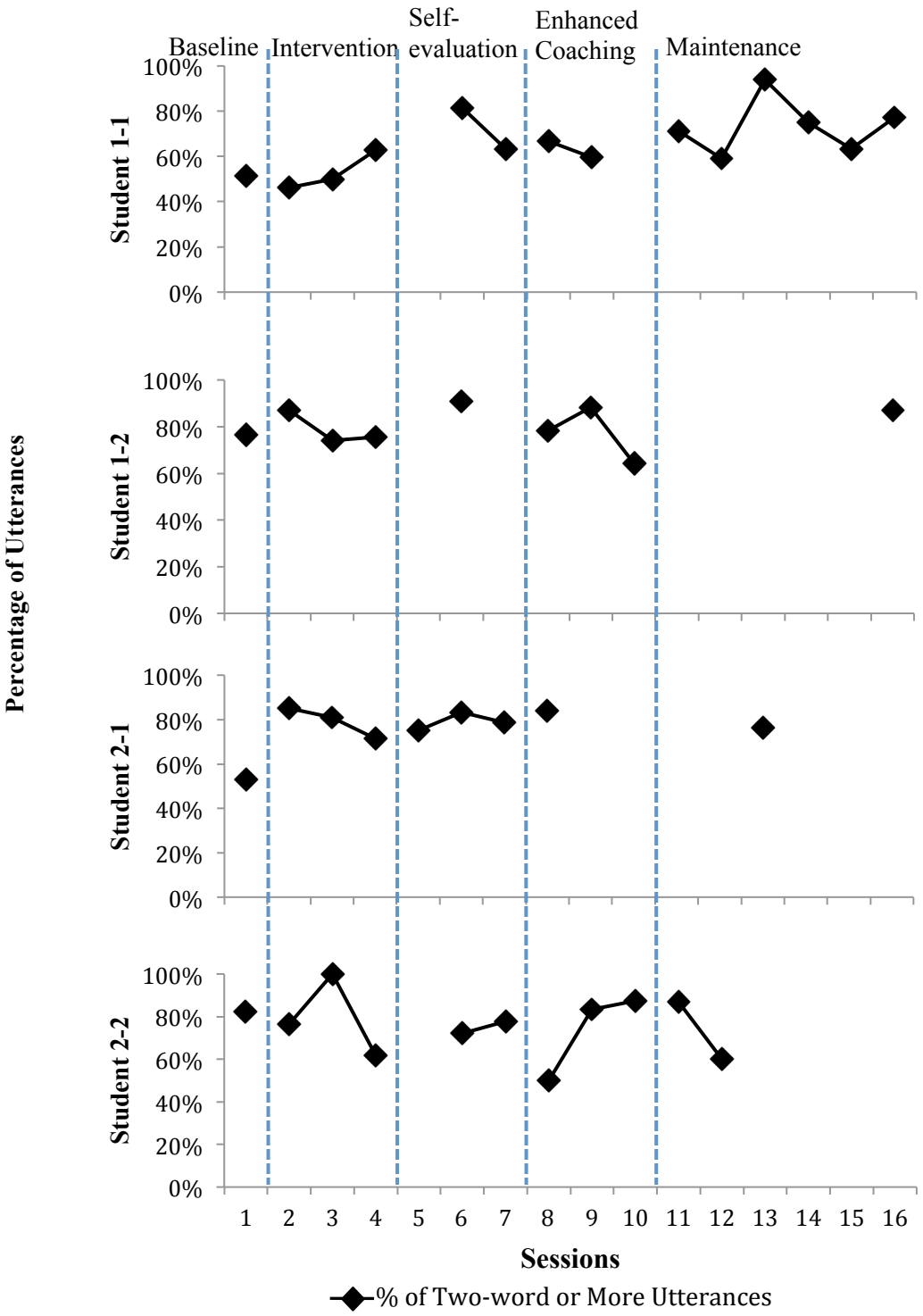


Figure 12: Student Data - Percentage of Utterances of Two or More Words per Session

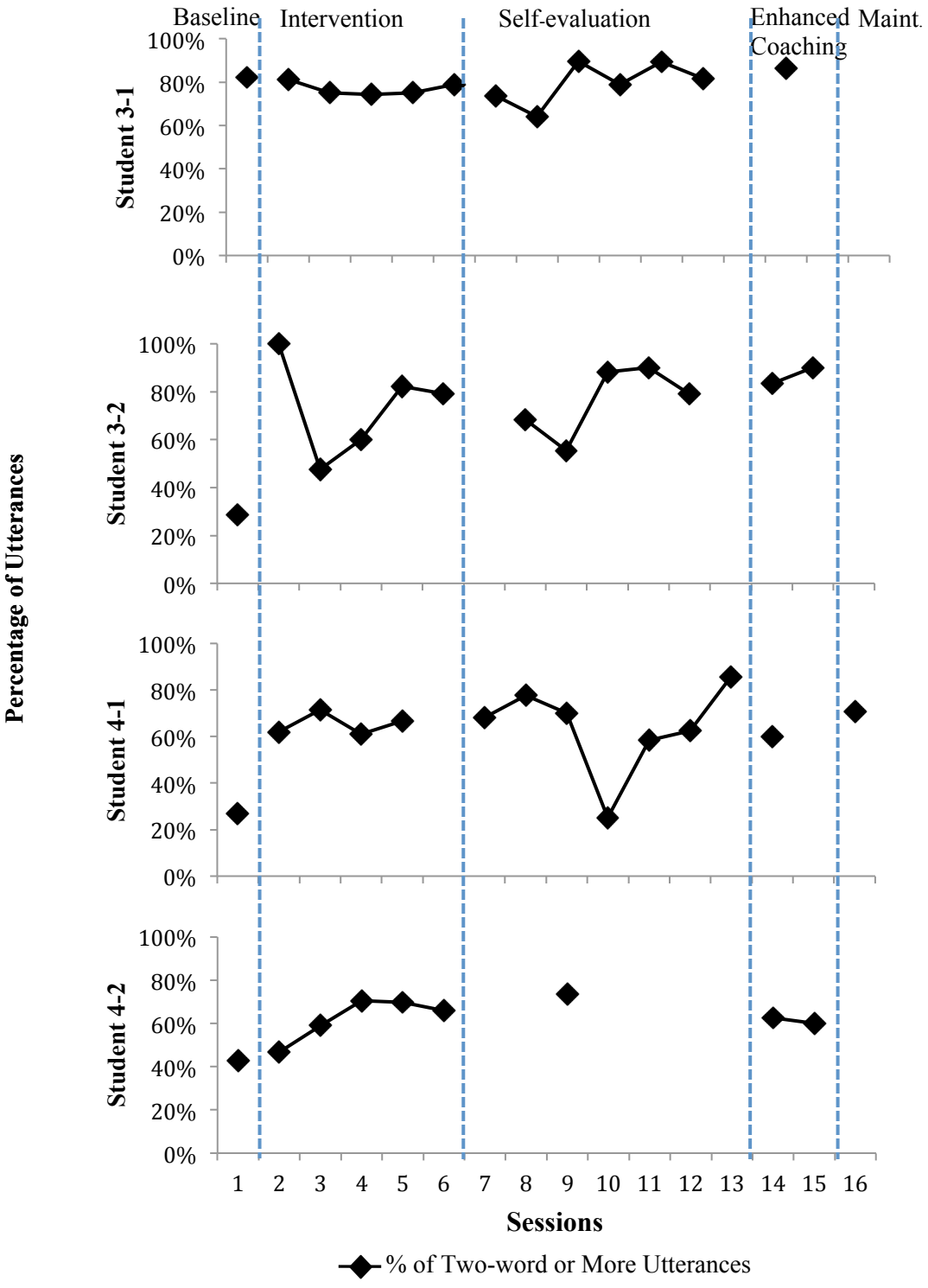


Figure 12 cont.

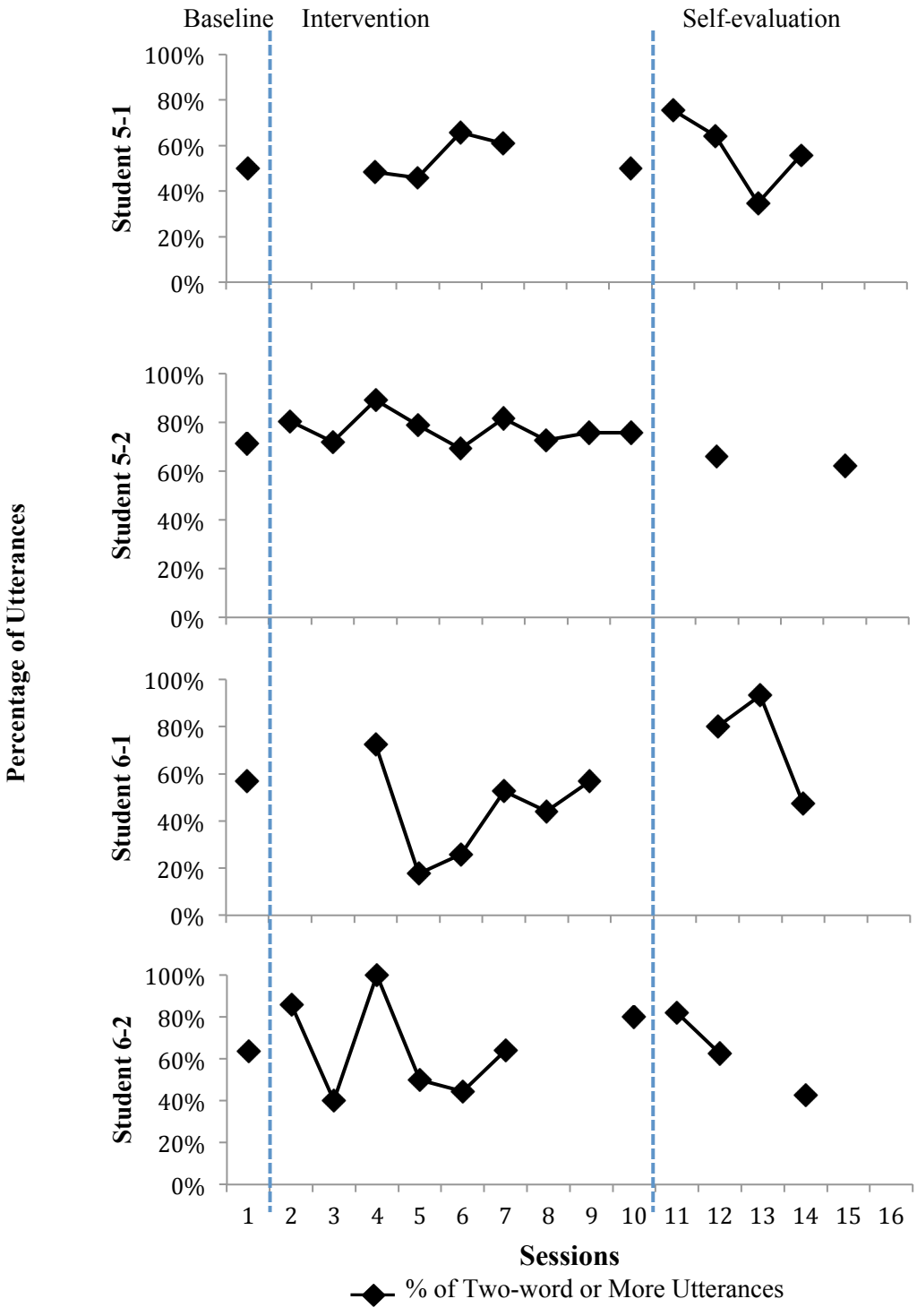


Figure 12 cont.

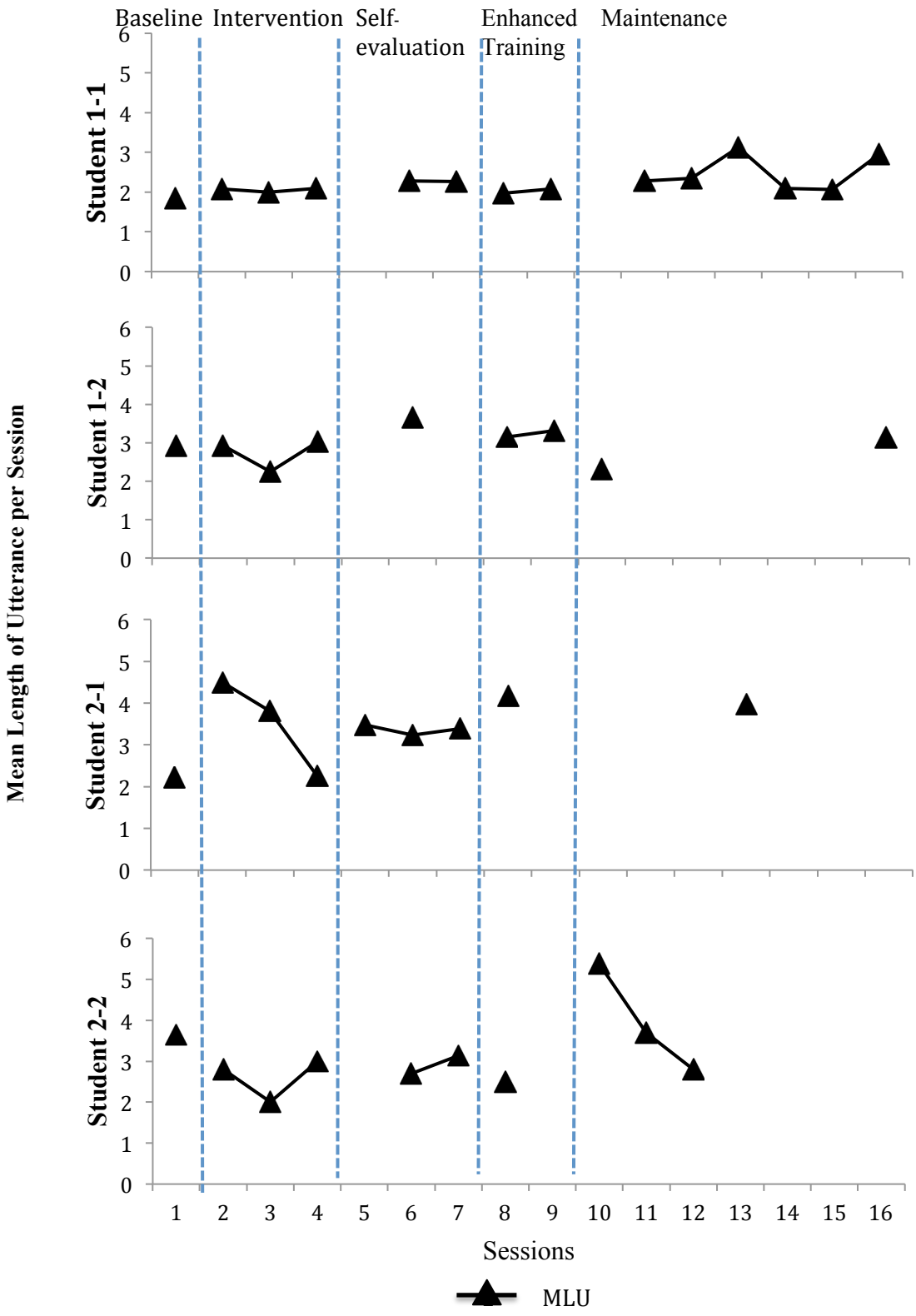


Figure 13: Student Data: Mean Length of Utterance per Session

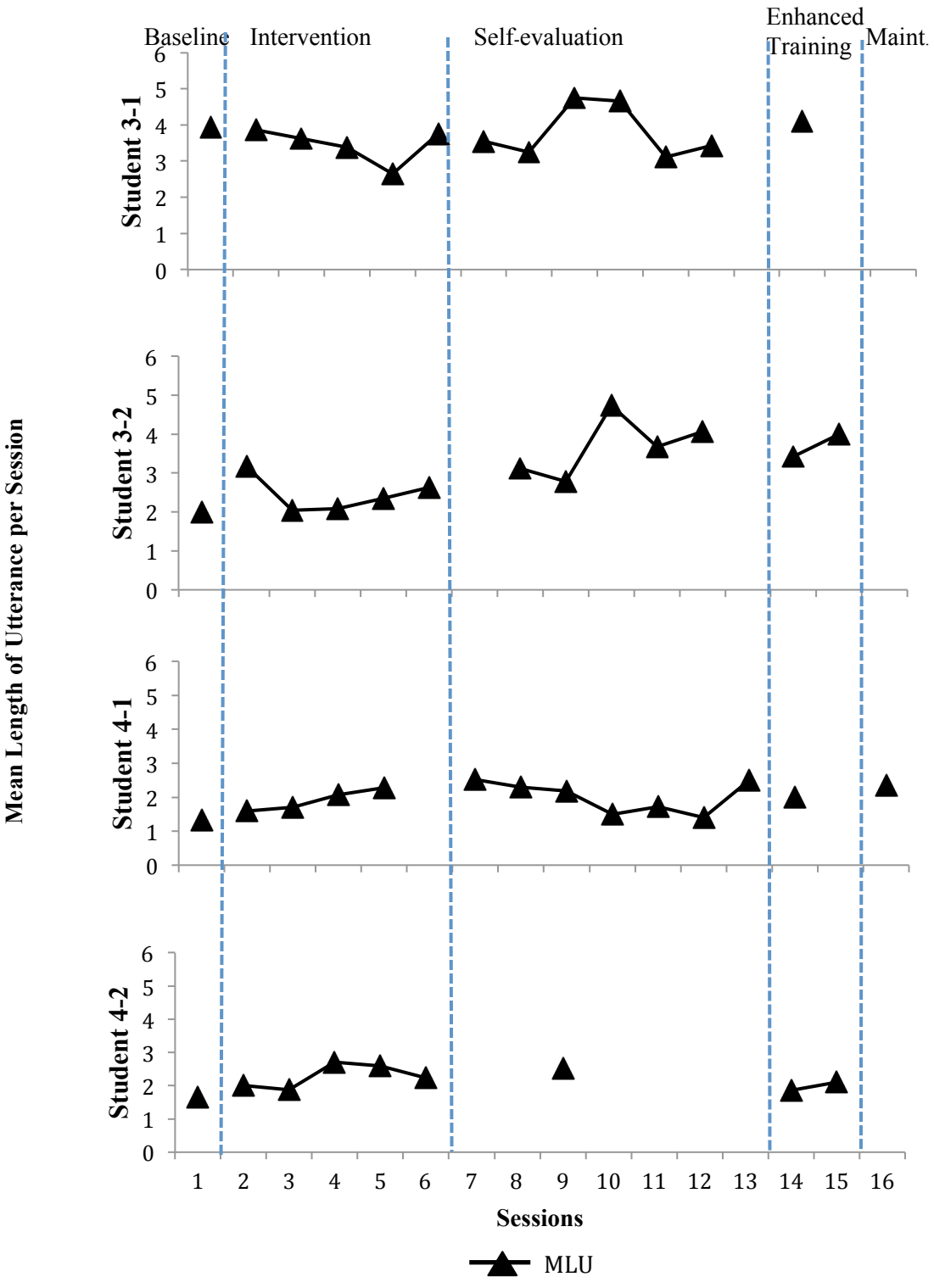


Figure 13 cont.

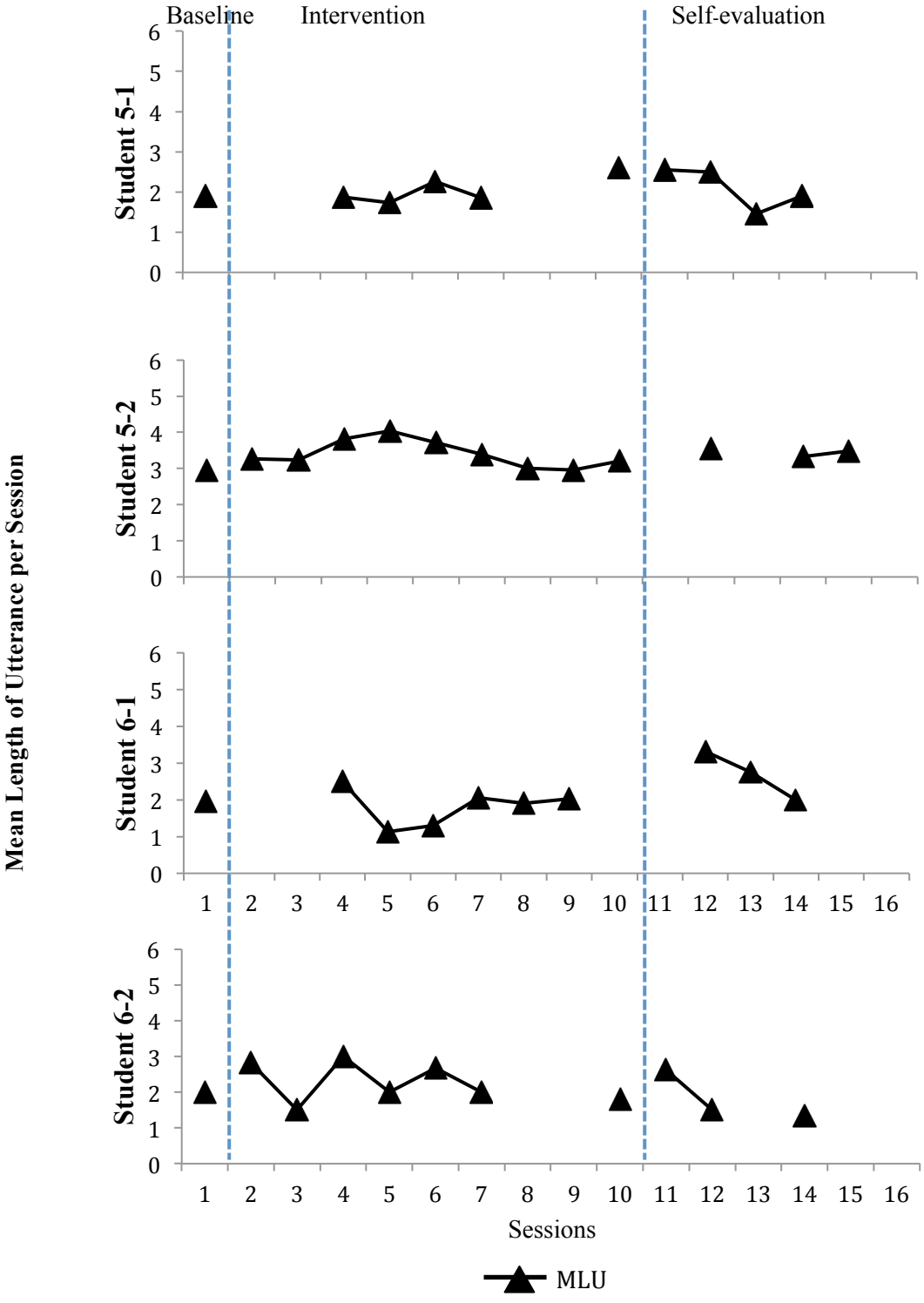


Figure 13 cont.

Data indicate a clear drop in the use of one-word utterances for Student 4-1, paired with an increase of utterances of two or more words at the beginning of the Intervention Phase. One-word utterances continued to drop as data for MLU showed gradual increases. Some decrease in one-word utterance use was seen for Student 4-2 while use of longer utterances increased from baseline. There was also an increase in MLU.

Much variability was present in data for Student 5-1, with one-word utterances remaining at or above baseline through all phases. MLU and the percentage of utterances of two or more words showed no notable change. Results for Student 5-2 remained surprisingly flat across all phases, with the only exception being a marked increase in one-word utterances during the last three sessions.

Student 6-1 showed variable use of one-word utterances across phases, ultimately ending in decreased numbers. MLU, likewise, was variable while remaining mostly at or below baseline. The percentage of two words or more being used showed a decrease followed by a consistent increase, including finishing the final few sessions near or above baseline. One-word utterances for Student 6-2 mostly decreased somewhat across study phases. Numbers for MLU were variable, not indicating a trend, with most sessions being at or slightly above baseline. Similarly, utterances of two or more words were variable with no noteworthy change from baseline.

In conclusion, the use of one-word utterances was seen to decrease or remain mostly the same in three quarters of the students while the remainder saw slight increases. The percentage of utterances of two or more words increased with seven students, four students showed no clear change from baseline, and only one student had a

slight decrease. MLU for 11 of the 12 students remained at, or demonstrated increases over, baseline levels.

## Procedural Fidelity

### Training Procedural Fidelity

Teachers were involved in three distinct training sessions during the course of the study. The first of these trainings, Oral Language Development Strategies Professional Development Training, was attended by all teachers in two group settings. The second, Self-evaluation Training, was conducted individually as each pair of teachers transitioned into the self-evaluation phase of the study. Enhanced Training, the third and final instructional element of the study, was introduced individually as each teacher progressed into the Enhanced Coaching Phase.

**Oral language development strategies professional development training**. Due to prohibitive travel distances the initial training on language development strategies was presented in two sessions, the morning session included four teachers from one school district and the teachers of another district in the afternoon of the same day. Each session of 3 hours in length included (a) a welcome, (b) a brief overview of emergent and oral language literacy, (c) introduction to and instruction for open-ended questions and expansions, (d) guided practice of target strategies, (e) a discussion of technical issues concerned with the effective use of video equipment, and (f) instruction in the coaching model to be used, responsibilities of each party, and scheduling. The more detailed Agenda and Procedural Fidelity Checklist can be found in Appendix A.

All teachers (*n*=6) participated in the initial professional development training. Detailed procedures outlined for the training were carried out in both sessions with 100% accuracy.

**Self-evaluation training.** Self-evaluation training was provided individually as each pair of teachers was prepared for self-evaluating one of their classroom observations on a weekly basis. This training included the questions asked each week in coaching sessions, along with the addition of (a) an introduction to the Observation Checklist (see Appendix B), (b) an explanation of the method of recording open-ended questions and expansions, (c) observing a videotaped observation together and guided practice recording strategies used, and (d) discussing results. The procedural fidelity checklist for this training can be found in Appendix C. All teachers participated in the Self-evaluation Training. Procedural fidelity for all six trainings was 100%.

**Enhanced training.** An additional training session was developed when data continued to show teachers struggling with the use of expansions in the interactions with their students. Enhanced Self-evaluation Training was designed to give specific and continued guided practice at coaching sessions, using selected examples directly from an observation videotaped the previous week. This training included (a) reflecting on the first four questions of the regular coaching session, (b) reviewing the Observation Checklist, (c) reviewing the components of open-ended questions and expansions, (d) viewing a videotaped observation together, (e) watching specific clips of 10 expansions and 6 open-ended questions from the video and practicing appropriate open-ended questions and expansions, and (f) discussion of choosing successful activities (see Appendix D). The teacher and coach then completed the regular coaching session

questions and set new goals for the coming week. All teachers participated in the Enhanced Self-evaluation Training. Procedural fidelity for this training was 100%.

**Coaching Procedural Fidelity**

Beginning in the week following the Oral Language Development Strategies Professional Development Training coaching began with the first four teachers. Teachers 5 and 6 had a school district holiday that week, so coaching sessions began the following week for them. The Coaching Session Notes form (see Appendix E) was used to record answers to the questions asked during each coaching session. This form also served as a procedural fidelity checklist. The questions of (a) What were your impressions of how this past week went? (b) What did you feel went well? (c) Tell me how you worked on your goals this week. What were the results? (d) What have you learned or noticed, either about yourself or your students? (e) Where would you like to see improvement? and (f) What would you like to do differently this coming week? Following these questions goals were developed, often times being discussed as the final two questions were being answered. Procedural fidelity for these coaching sessions during the Intervention Phase was 99%.

When teachers moved into the Self-evaluation Phase coaching sessions continued following the same format, with the inclusion of teacher reflection on the results of their self-evaluation activities in the discussion of the questions. The Coaching Session Notes form was used during this phase. Procedural fidelity for the Self-evaluation Phase was 99%.

Upon entering the Enhanced self-Coaching Phase the Enhanced Self-evaluation Coaching Procedural Checklist (see Appendix F) was used along with the Coaching

Session Notes form. These coaching sessions began with the first four coaching session questions, followed by a review of the Observation Checklist and the components of open-ended questions and expansion. Results of the teacher's self-observation of the selected videotape from the previous week were discussed. Preselected video clips of 10 opportunities for expansions and 6 opportunities for open-ended questions were then viewed together, followed by modeling of strategies and guided practice. The choice of table activities was then reviewed, including examples of successful activities and possible future activities. Then the remaining coaching session questions were asked and goals were set for the coming week. Five teachers participated in one or more enhanced coaching sessions. Procedural fidelity for these enhanced self-evaluation training coaching sessions was 99%.

In addition to review of coaching session notes and procedural fidelity checklists 10% of coaching and training sessions were videotaped and observed to verify procedural fidelity. These sessions represent all teachers, Intervention, Self-evaluation and Enhanced Coaching Phases, and also include self-evaluation and enhanced training sessions. Procedural fidelity was found to be 100%. With the addition of this information, procedural fidelity for trainings and coaching sessions across all phases of the study remained consistently high, with a range of 99 -100%.

## Interobserver Agreement

In order to establish interobserver agreement (IOA) for data collected from the many videotaped classroom observations obtained during this study, similar procedures were used for both teacher and student data. Two graduate research assistants were trained on the identification and recording of open-ended questions and expansions,

including all components involved. Another graduate assistant was trained on the identification and recording of information pertaining to student utterances. Each observer was trained and practiced until she were able to correctly identify and record target behaviors with accuracy of 90% or above. At any time during data extraction that accuracy fell below 90% the observer was re-trained by reviewing definitions and examples of open-ended questions and expansions, along with guided practice, until accuracy returned to 90% or higher.

To determine if collected data are consistent from observer to observer, minimizing bias, and reflecting well-defined target behaviors (Kazdin, 1982), 25% of all observations randomly selected across all phases of the study were observed by a second observer. A goal of 90% agreement between observers was desired.

Interobserver agreement results for teacher use of target strategies during table and generalization activities for each phase can be found in Table 7. IOA for open-ended questions during table activities across all phases ranged from 93 to 95% (range 81-100). Observations for generalization purposes during circle time and mealtime had IOA of 97 to 100% (range of 83-100). IOA for expansions during table activities was 98 to 99% with a range of 83-100 across all phases. IOA for expansions during generalization activities was 100%, most likely due to the unusually low use of expansions. Interobserver agreement for student data on the number of utterances per session during table activities across all students and all phases was 95% (range 87-100). IOA for student MLU across all phases and students was 97% (range 89-100).

## Social Validity

In order to further evaluate the degree to which the outcomes of this study are found to be useful in their intended settings, two methods of additional data collection were used. An exit interview was conducted with each teacher at the end of the study. In addition, a questionnaire was given to each teacher's immediate supervisor, an education specialist, to share views on the progress of the teacher and the usefulness of study results, for both teachers and students.

### Exit Interview

In addition to the Final Teacher Questionnaire discussed earlier, the Exit Interview provided other useful information pertaining to teacher perspectives on (a) the benefits of coaching and self-evaluation, (b) improvement to teaching skills, (c) benefits to students, (d) recommended changes to implementation of a similar coaching model with self-evaluation, and (e) important things gained from the study (see Appendix G). While teachers responded in a variety of ways, recurring responses will be discussed.

When asked in what way(s) did their skills as a teacher change as a result of the study all teachers responded that they became more aware of asking open-ended questions and using expansions, along with recognizing opportunities for these strategies. Half of the teachers also indicated an increased awareness of their interactions with their students.

The second question in the interview asked for ways their students benefitted from participation in the study. Five teachers noted improvement for participating students in such areas as increased vocabulary, inclination to talk more, improvement in thinking skills, and an increased ability to answer more difficult questions.

Table 7

Interobserver Agreement (%) For Teacher Observations

| | Baseline | Intervention Phase | Self-evaluation Phase | Enhanced Training Phase | Maintenance |
|---|---|---|---|---|---|
| *Table Activities:* | | | | | |
| Open-ended Questions: | 94 (83-100) | 94 (86-100) | 95 (84-100) | 93 (87-100) | 94 (81-100) |
| Expansions: | 98 (83-100) | 99 (83-100) | 99 (85-100) | 98 (83-100) | 99 (86-100) |
| *Generalization:* | | | | | |
| Open-ended Questions: | 100 (97-100) | 97 (83-100) | 97 (83-100) | 97 (86-100) | 97 (90-100) |
| Expansions: | 100 | 100 | 100 | 100 | 100 |

Teachers were asked to indicate which parts of the coaching and self-evaluation process were of most benefit to them. Four teachers felt they gained much by being able to observe themselves in their interactions with students. Half of the teachers indicated that the guided practice included in the enhanced training and enhanced coaching gave them a deeper understanding of how the strategies should be used and increased awareness of opportunities for their use.

When asked to indicate what changes they would make to the procedures used in the study should the coaching and self-evaluation model be used in an ongoing professional development program, all teachers contributed insightful suggestions. Three of the teachers recommended using the enhanced coaching procedures, which included reviewing video clips in conjunction with guided practice, from the very beginning. Half recommended keeping goals for a longer length of time, such as 2 weeks or a month, giving more time to work on them. Two teachers suggested fewer videotaped activities each week and another two teachers thought more time between coaching sessions would be beneficial.

The final question asking for the most important thing gained from participation in the study indicated that the majority of teachers felt their skills as a teacher had improved. Half of the teachers indicated an improvement in their interactions with their students. Other responses included more individual benefits as a result of observations made during self-evaluation. One teacher who thought she was asking many open-ended questions discovered that the questions were not open. She also realized that she often answered her own questions, not giving the student an opportunity to answer. Another teacher realized that what she thought were statements being made to students were

actually questions, and that this tendency to ask questions extended to other situations, both in and out of the classroom. A relatively new teacher felt gaining confidence in her teaching abilities was a benefit of the study.

**Education Specialist Final Questionnaire**

The supervising education specialist for each teacher completed a questionnaire at the end of the study focusing on teacher oral interactions with students and views on the value of study outcomes as observed during classroom observations. Results of the Education Specialists Final Questionnaire are displayed in Table 8. In general, the majority of education specialists strongly agreed on the value of different aspects of study outcomes, while only one education specialist slightly agreed with all stated study outcomes. When scoring the statements regarding teacher oral interactions with students both statements of seeing positive improvements in overall oral interactions and the increase of open-ended questions received averages of 4.3, with the former having a range of 3 to 5 and the latter a range of 4 to 5. Teacher use of expansions had the lowest average of 4.1 (range 3 to 5), indicating mostly slight agreement that there had been an increase of expansions over the course of the study.

Table 8

Results of Education Specialists Final Questionnaire

| Question: | Teacher: 1 | 2 | 3 | 4 | 5 | 6 | Group Average |
|---|---|---|---|---|---|---|---|
| ***Teacher's Oral Interactions with Students:*** | | | | | | | |
| 1. Positive improvements can be seen in the teacher's overall oral interactions with students. | 5 | 4 | 3 | 5 | 5 | 4 | 4.3 |
| 2. The teacher's use of open-ended questions appears to have increased over the course of the study. | 5 | 4 | 4 | 5 | 4 | 4 | 4.3 |
| 3. The teacher's use of expansions appears to have increased over the course of the study. | 4 | 4 | 3 | 5 | 5 | 4 | 4.1 |
| ***Value of Study Outcomes:*** | | | | | | | |
| 4. Improving teacher literacy-related oral language strategies for use in the classroom is important for developing student abilities. | 5 | 5 | 4 | 5 | 5 | 5 | 4.8 |
| 5. The use of coaching sessions is an effective way to follow up on learning gained from professional development training. | 5 | 5 | 4 | 5 | 5 | 5 | 4.8 |
| 6. Having teachers evaluate their own performance as they interact with their students is an effective way to promote teacher learning. | 5 | 5 | 4 | 5 | 5 | 5 | 4.8 |
| 7. The teacher outcomes from this study were worth the time spent. | 5 | 5 | 4 | 5 | 5 | 5 | 4.8 |
| 8. Student outcomes from this study were worth the time spent. | 5 | 5 | 4 | 5 | 5 | 5 | 4.8 |
| 9. A modified version of the coaching and self-evaluation method used in this study would be useful in developing other strategies for our teachers to use in their classrooms. | 5 | 5 | 4 | 5 | 5 | 5 | 4.8 |

1-Strongly Disagree 2-Slightly Disagree 3-No Strong Feelings 4-Slightly Agree 5- Strongly Agree

# CHAPTER 4

# DISCUSSION

Inconsistent standards and requirements for preparation of early childhood educators necessitate effective in-service training to provide opportunities to increase knowledge, skills, and use of effective teaching strategies. The development and implementation of professional development for early childhood teachers has presented many challenges for those concerned with providing optimal programs for young children. Current methods of professional development have been unable to adequately prepare all teachers with the knowledge and skills expected of them (U.S. Department of Education, Office of Planning, Evaluation and Policy Development, Policy and Program Studies Service, 2010). Follow-up activities to professional development, such as on-site coaching, are considered one of the factors of greatest impact on learners (Winton, McCollum, & Catlett, 2008). Coaching models, when combined with traditional training, have been shown to significantly improve language and literacy classroom practices (e.g., Neuman & Cunningham, 2009). This study provides some preliminary supports to the emerging literature base that finds the addition of coaching to be an effective professional development practice for early childhood educators. A discussion of the results of the current study will be presented along with limitations and implications for both practice and future research.

## Open-ended Questions

The first skill introduced in professional development training was not unknown to the participating teachers. Baseline means indicate that all teachers used open-ended questions (OEQ) to varying degrees, the average across teachers being 8.75 OEQ, with most using an average of 10 to 12 OEQ per session. In addition, all teachers immediately increased their use of OEQ at the beginning of the Intervention Phase, which directly followed the professional development training and the initiation of weekly coaching sessions. Mixed results were recorded for sessions during the Intervention Phase, with variability continuing into the Self-evaluation Phase. Only half of the teachers showed increases in OEQ during the Self-evaluation Phase. One possible explanation for this may be the circumstances under which the teachers were working when they were in the Self-evaluation Phase. The three teachers who showed increases in OEQ were in the first two pairs entering the Self-evaluation Phase, meaning they were requested to spend additional time in the self-evaluation process earlier in the study. As the end of the school year drew closer and the remaining pair of teachers entered the Self-evaluation Phase, multiple concerns and time constraints emerged as teachers were informed of impending school assignment changes, requested to pack away classroom materials, and participated in student evaluations and meetings with parents. End of the year activities demanding more of their time may have affected the overall level of attention teachers were able to give to the study. Though no data were specifically collected on this topic, teacher comments during coaching sessions often turned to discussions of not having sufficient time to devote to the study.

An additional explanation for the decrease in OEQ during the Self-evaluation Phase may stem from the timing of the self-evaluation of classroom observations and the next coaching session. Again, while data were not collected on this point, 2 teachers directly commented on watching the videotape and completing the Observation Checklist just minutes before the coaching session began. This would result in losing the benefits of self-observation, self-evaluation, and reflection had they viewed the assigned videotape in a timelier manner. All teachers were then encouraged to view videotapes as soon as possible following coaching sessions, though actual compliance to this request was not recorded.

With the addition of joint viewing of videotapes and guided practice to coaching sessions during the Enhanced Coaching Phase, all teachers maintained or increased the use of OEQ. In addition, maintenance probes indicate that all teachers maintained levels of OEQ use at or above baseline, with most teachers consistently using OEQ 50% or more above baseline rates.

## Expansions

The second skill targeted in the professional development training was expanding on student utterances, a skill few teachers used regularly. One half of the teachers used no expansions during baseline observations, with the other half averaging one or fewer expansions per session. All teachers made gains in expansion use during the Self-evaluation Phase (see Figure 4), with mean usage doubling from that of the Intervention Phase. This suggests that the observation of classroom activities on video may have provided a way for noticing missed opportunities for expansions and encouraged increased use of the strategy. It is also possible that seeing oneself correctly using the

strategy provided reinforcement of its use, similar to such strategies as “self-as-a-model” (Hosford, 1980) and self modeling (Dowrick & Raeburn, 1995).

As means for the Enhanced Coaching Phase (see Figure 4) decreased from the Self-evaluation Phase, those teachers who continued into Maintenance Phase maintained increases over baseline, Intervention, and Self-evaluation Phases. This may reflect a latent effect from enhanced coaching sessions influencing the use of expansions as teachers struggled to incorporate the more difficult strategy of expansions to their repertoire of skills.

In looking at combined teacher means (Figures 3 and 4) it is interesting to note that when expansions, as a whole, increased during the Self-evaluation Phase the use of OEQ showed little or no improvement for most teachers, with some actually decreasing usage. In the subsequent phase teachers increased OEQ and expansions decreased. Coupled with the overall low levels of expansions used throughout the study this may suggest that expanding on student utterances is a more difficult skill to develop. Hsieh, Hemmeter, McCollum, and Ostrosky (2009) found similar results in their study involving three clusters of emergent literacy teaching strategies. The cluster of strategies for shared book reading, a common activity in most early childhood classrooms, required very little instruction and practice for teachers to achieve criterion. The other clusters of skills, appearing more difficult and including oral literacy skills, presented more variable data and required a longer time to master.

In a similar study that included a professional development program with strategies for literacy improvement in Head Start classrooms, Powell, Steed, and Diamond (2010) found more difficult skills, or those that may not be consistent with

current classroom practices, may not receive frequent and sustained attention if there are other less difficult strategies on which to focus. While the more difficult strategy referred to in the Powell et al. study was phonological awareness, the concept of avoidance would seem applicable to the current study. It would appear that OEQ were more familiar to the participating teachers considering the degree to which they were already using them in the classroom, thus already a part of classroom practice. OEQ may also be a less difficult strategy to implement as the skill originates from the teacher and can be asked when she is prepared. The question need not relate to the current activity and can be asked of any child. Expansions, on the other hand, require the teacher to repeat and enlarge a child's utterance with little time to think or prepare. This would seem to draw on different teacher abilities than those necessary for OEQ and may have been a factor in the low levels of expansions used.

Another interesting point in reference to data collected on expansions involved how faithfully teachers used all components of the strategy. Positive reinforcement, the third component included in an expansion, was seldom used (see Table 2). This, too, would appear to be a difficult strategy to master when it has not been a part of a teacher's repertoire in the past. One teacher, when questioned about not using this component, responded that positive reinforcement was overused by special education teachers and was usually neither sincere nor effective. This attitude seems to be supported by Horn, Lieber, Li, Schwartz, and Sandall (2000), who found that instructional strategies found to be effective with young children with disabilities may not be used consistently, especially when these strategies were not in harmony with the educator's instructional philosophy. Additionally, in a study involving a language and literacy intervention with Head Start

children, Wasik, Bond, and Hindman (2006) found that only 40% of the participating teachers offered explicit praise to their students for demonstrating the desired behavior. While it is unclear as to the manner in which the data were compiled, this outcome is consistent with our findings. Five of the 6 teachers (83%) were observed to use positive reinforcement during most phases across the study, though the number of occurrences was very low within each phase.

Overall, results from the study were more variable than anticipated, at times within phases, across phases, and across teachers. There are a number of possible explanations for these results. One such explanation is teacher fatigue, causing inconsistent use of the targeted strategies. Although formal data was not collected to support this, social validity measures revealed teacher expressions of feeling overwhelmed, pressed for time, and feeling stress with the extra work required for the study in addition to usual classroom responsibilities. These were expressed during coaching sessions and the exit interview.

Another possible explanation for inconsistent use of strategies is the time constraints placed upon teachers at the specific time of the school year. Coaching sessions were squeezed into early morning or late afternoon planning times when teachers had other pressing responsibilities to attend to. It was also a challenge for many of the teachers to find ample time to allocate for self-evaluation and reflection.

Years of experience and level of education attained were looked at to see if they might have been contributing factors to variable results. No direct relationships could be found when looking at results for strategy use and years of experience. However, while data in the current study do not specifically support the following, some of the more

experienced teachers commented that they were finding it difficult to change the ways they had been talking with children for many years. Two of those with much experience appeared to have difficulty responding to a student utterance with anything other than a question. In fact, these two teachers noticed during self-evaluation that even when they thought they were using expansions correctly the videos revealed they consistently responded to students by repeating their utterance in the form of a question without expanding. This reversal of the expectation of experience aiding in the development of new strategies may be explained by considering teacher-student interactions as a fundamental skill, being developed in the early years of teaching. As pointed out in the review of literature, over time expert teachers develop routines for the ways in which they interact with students (Leinhardt & Greeno, 1986; Leinhardt, Putnam, Stein, & Baxter, 1991), and these automatic routines can be resistant to reflection or change (Putnam & Borko, 2000). This may explain the difficulty some participating teachers felt they had in changing their automatic routines for verbal interactions with students

Like teaching experience, the education level of the teachers did not appear to influence study results. In support of these findings, the study of Wasik et al. (2006) produced similar results, where they found the Head Start teachers' implementation of targeted strategies was not affected by level of education or teaching experience.

A final possible explanation for the variability in teacher outcomes and relatively low strategy use of expansions is that this is typical of learning a new behavior. In a study of reading-focused coaching with teachers of grades 1-6, Gersten, Morvant, and Brengelmann (1995) found uneven patterns of implementing recommended strategies. Target skills were at times used consistently, intermittently, or ignored. Other studies

support this finding (e.g., Horn et al., 2000). Wasik, Bond, and Hindman (2006) explain that when attempting to change the ways in which teachers interact verbally with students considerable time must be invested to work closely with teachers. Opportunities for modeling and practicing target behaviors are needed. The element of time being necessary to acquire new skills is emphasized by Sigel's (2006) assertion that the time necessary for a teacher to adopt a new skill is dependent upon how closely that skill aligns with preexisting teacher practices. Adopting new practices can be as straightforward as enhancing previously held practices or as difficult as modifying or replacing existing practices. In addition, Wasik et al. (2006) found that even when 70% of their participating teachers significantly changed the way they interacted verbally with children, the remaining 30% did not alter their interactions very much.

Central to work done by Sherin and van Es (2005) is the assertion that the ability to notice classroom interactions is a key component of teaching proficiency. The act of noticing provides opportunities for making connections between classroom interactions and broader concepts and principles of teaching and learning. The authors found the use of video an effective aid to helping teachers learn to notice, thus increasing their proficiency as teachers. The teacher views expressed in the current study would appear to support these findings. In the Final Teacher Questionnaire teachers gave the highest scores to the statements indicating the self-evaluation process allowed effective assessment of student verbal interactions and that watching and evaluating themselves in these interactions was an effective way to improve their use of the target strategies. In effect, viewing the videotapes of classroom observations gave the teachers the

opportunity to learn to notice the details of their verbal interactions with their students and thus improve on those interactions.

While all teachers felt the beneficial effects of self-evaluation, one of the challenges to using video in a study such as this involves teachers' views of operating the video recorder themselves. The statement that generated the lowest score on the questionnaire referred to how time-consuming each teacher found the videotaping to be. Responses to this statement included the full range of scores, with some teachers finding the requirement of videotaping activities to be overly time-consuming, and others not finding videotaping time-consuming at all. Explanations for this range of scores could include a number of possibilities. Teachers' level of confidence in the operation of the video recorder, comfort level of being videotaped, and planning and organization within the classroom are a few factors that could contribute to the results regarding the actual logistics of videotaping. Asking more specific questions to those who found the videotaping to be too time-consuming would shed light on ways to improve teachers' experiences while using videotaping as a component of this coaching model.

All teachers participated in an exit interview with the researcher at the conclusion of the study. In general, all teachers felt their teaching skills improved over the course of the study through being more aware of the target strategies of open-ended questions and using expansions, and in recognizing appropriate opportunities to use these strategies. Most teachers felt the most beneficial part of the coaching model was the opportunity of observing themselves in interactions with their students. Half of the teachers appreciated the component of guided practice for providing a deeper understanding of how the

strategies should be used. Finally, 5 of the 6 teachers reported improvement in oral interactions with their students.

## Student Outcomes

Data compiled on student progress showed that 75% of the students completed the study using one-word utterances at or below baseline levels. Utterances of two or more words remained at baseline or increased for 11 of the 12 students. The same number of students remained consistent with MLU baselines or saw increases. Slightly more than half of the students (7 of 12) increased words spoken per minute following the Intervention Phase and continued these elevated levels through the remaining phases. These results may reflect the impact of teacher implementation of the target strategies upon student oral literacy. However, it is possible that other factors influenced outcomes. For those students who demonstrated improvements in their verbal interactions, it is unclear to what extent natural maturation contributed to student progress. As the study progressed it became clear that all student measures were possibly impacted by a number of factors. As the number of students participating in each observed activity fluctuated depending on student attendance, more or less attention would be given to individual students. Illness and family circumstances affected attendance for some students. Other factors such as the type of activity, instructional objectives and opportunities given to speak could have a direct influence on how often the child has occasions to speak.

## Limitations

In addition to variability in data, there are a number of limitations to consider regarding this study. As this study included a small sampling of teachers (n=6), care

should be taken when attempting to generalize the results of the study to other teacher populations, such as those with more education or nonvolunteers, or to settings other than Head Start.

An additional limitation concerns the coaching process. Although procedural fidelity was high in relation to implementation of the major components of coaching sessions, a fine-grained analysis of all coaching interactions was not conducted. Measurable information such as length of sessions and topics discussed, along with more difficult aspects to document that could include types of emotional support and encouragement given, produce very individualized coaching interactions. Although the written record of the coaching session summarized the major proceedings of the meeting, the full details of what was discussed were not fully represented. These variations teacher-to-teacher and session-to-session may have influenced the results of the study. In addition, just as the fidelity with which teachers implement strategies in the classroom may not be indicative of the quality of the instruction (Justice et al., 2008), fidelity in coaching procedures does not necessarily ensure the quality or outcomes of the process.

Another limitation arises from teachers having been unable to consistently use all components of the target strategies, especially the use of positive reinforcement when expanding on student utterances. It is unclear how the lack of positive reinforcement may affect student outcomes. In addition, the impact of inconsistent use of other components of either open-ended questions or expansions is inconclusive.

As expected, the initial professional development training did not produce consistent, conclusive results across teachers (see Figures 1 and 2). However, a limitation of this study is reflected in the increased use of OEQ and decreased use of expansions

during the Enhanced Coaching phase. While the previous, Self-evaluation phase, saw increased use of expansions and continued levels of OEQ in general (see Figures 3 and 4), the addition of joint viewing of observations and guided practice of the strategies in the Enhanced Coaching phase resulted in increases in OEQ yet failed to maintain gains in expansions. This would seem to indicate a limited effect of the Enhanced Coaching Phase to influence two strategies simultaneously.

While student progress was not the major focus of this study, there are two limitations to consider when reviewing student results. First, given the small number of student participants in the study ($n$=12) and limited student demographics, care should be taken when attempting to generalize results. Second, this study was not designed to ascertain if, or the degree to which, teacher implementation of oral language strategies impacted student learning. Without the identification and control of confounding variables, causal effect cannot be assumed and any student progress should not be attributed solely to teacher use of target strategies.

## Implications for Practice

The results of this study suggest several implications for practice in early childhood education settings. First, in-service training developers planning a similar coaching model as follow up to professional development should consider individualizing the coaching experience for each participant. This recommendation will enable coaches to gauge the complexity of skills being taught against each teacher's previous knowledge and practice. This will aid in determining the appropriate intensity and duration for the learning experience (Joyce & Showers, 2002), which has been found to be especially significant when teaching new skills (U.S. Department of Education, 2010).

Second, the use of Enhanced Coaching phase components, those of modeling, guided practice and discussion of explicit examples from ones' own videotaped observations, should be used throughout the entire coaching intervention. The addition of these components was found to increase the more familiar, and possibly easier, strategy of OEQ and the apparently new skill of expanding, more than during the Intervention Phase with coaching alone.

A third suggestion for implementing a similar coaching model with early childhood educators involves determining the optimal number of skills to be introduced at the same time (Powell, Steed, & Diamond, 2010). This important aspect of individualizing each teacher's training experience should be a key consideration when focusing on mastery of more difficult skills (Hsieh et al., 2009). This recommendation would address the tendency to focus on skills that appear to be easier to implement, are already part of a teacher's repertoire, or seem to be more relevant to current classroom practices (Powell et al., 2010), possibly leaving more difficult, and potentially more important, skills un-mastered.

## Implications for Future Research

Much research has been conducted in the area of effective professional development models for teachers of school age students. Given the relatively few studies undertaken to investigate professional development impacts in the field of early childhood education, it remains to be shown if these same models of professional development will also impact preschool teachers and their young students. A first area for future research lies with the important connection between teacher implementation of desired behaviors or strategies and student outcomes, which is rarely found to be the true

focus of PD training experiences (Bertcher, 1988; Guskey, 2000; Guskey, 2003a). Through the use of an experimental group design future efforts should focus on measuring the impact the coaching model is found to have on student oral literacy development outcomes. This is consistent with current recommendations that more studies are needed that include a component to examine whether changes in teacher literacy teaching skills influence children's literacy development (e.g., Hsieh et al., 2009).

In addition to determining the impact of teacher strategy use, another focus for future research stems from the critical objective of effecting positive student outcomes. With professional development programs requiring considerable investment of often very limited resources, both of time and money, the amount of time and effort required to change certain teacher behaviors should be evaluated to determine if it is proportionate to the amount of student change expected. Considering that some teacher behaviors may be particularly difficult to change (Putnam & Borko, 2000), other avenues of obtaining similar student outcomes may be worth exploring. As the most effective strategies to produce desired student outcomes are identified, it will be important to determine which strategies are most efficient in terms of teacher time and effort.

Another focus for future research involves examining the optimal frequency and length of coaching sessions. Similar studies, which influenced the development of the current study, used various schedules for implementing coaching sessions. From two to three times a week, to once a month or less, researchers have varied greatly in the frequency of coaching sessions. The same holds true for the duration of these sessions, though most studies did not specify an exact or average length of time for coaching

sessions. Studying optimal frequency and length will aid in the development and planning stages of effective professional development training, along with potentially optimizing the time early childhood educators have available for professional practice improvement activities.

In addition to the logistical aspects of coaching, the essential features of coaching need to be identified. As Powell et al. (2010) point out, outcome studies of professional development programs that include an element of coaching within their design have often reported only basic procedural fidelity results such as the number of sessions held. Hulleman and Cordray (2009) point out that intervention fidelity is a central piece in an effective program and studies of literacy coaching should go beyond this common practice of only counting the number of coaching sessions completed. As few studies review the variables affecting coaching, research that looks at the dimensions of coaching that vary across coaches and coaching sessions would begin to identify components of quality coaching characteristics.

## Conclusion

Defining the elements of effective coaching models serves to expand the current research base that informs the development of professional development programs that meet the diverse needs of teachers educating young children. This study has provided a preliminary examination of the effects of self-evaluation of videotaped observations, with and without modeling and guided practice. Results suggest that self-evaluation maintains or increases the use of teaching strategies, particularly with more difficult skills such as expanding on student utterances. The addition of modeling and guided practice resulted

in continued improvement over baseline values, most noticeably in more familiar strategies such as open-ended questions.

Implications of these results suggest the need for further research to expand current empirical understanding of effective coaching strategies. Identifying quality characteristics of effective coaching models can strengthen professional development efforts by bridging the gap between knowledge acquisition and practice, enabling early childhood educators to incorporate evidence-based practice within their own classrooms.

# APPENDIX A

# ORAL LANGUAGE DEVELOPMENT STRATEGIES PROFESSIONAL DEVELOPMENT TRAINING AGENDA AND PROCEDURAL FIDELITY CHECKLIST

Oral Language Development Strategies
Professional Development Training
**Agenda and**
**Procedural Fidelity Checklist**

**8:30 – 8:45** **Welcome:**

- Introductions as needed
- Explanation of the agenda for the session
- Discussion regarding the videotaping of classroom activities
    - Concerns/questions
    - Helpful hints
    - Troubleshooting

**8:45 – 9:45** **Instruction**

- Brief overview and background:
    - Emergent literacy and oral language literacy
    - Risk factors for children in poverty
    - The need for high quality teacher-child oral interactions
- Instruction in the oral language development strategies, including examples and nonexamples
    - Open-ended questions
        - Purpose
        - Steps
            - Establish joint attention
            - Question is formed to require no single correct response
            - "Wh" questions and their degree of difficulty
    - Wait time
        - Purpose
        - Use with open-ended questions
        - Appropriate length (three seconds)
    - Expansions of child utterances
        - Purpose
        - Steps
            - Expansion of two to four words
            - Feedback
                - Recasts: definition and use
                - Positive reinforcement: verbal, gestural, facial expressions

**9:45** **Brea**

**10:00 – 10:40** **Instruction (continued):**

- Guided practice on oral language development strategies
    - Guided practice with instructor

Practice in pairs with instructor assistance as needed

**10:40 – 11:00** **Technical Issues**

- Use of video equipment,
- Capturing good quality video
    - Electronic submission of videos

**11:00 – 11:30** **Coaching Model**

- Introduction of the coaching model to be used, adapted from Hanft, Rush, and Shelden (2004). (See Overview of Coaching Model)
- Responsibilities of the teacher and the coach
- Schedule for coaching sessions

# APPENDIX B

# TEACHER OBSERVATION CHECKLIST

# OBSERVATION CHECKLIST

| Teacher: |
| --- |
| Date: |

## Open-ended Questions

| | Gain attention | No single correct response | Wait time: (3 seconds if needed) |
| --- | --- | --- | --- |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
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| 28 | | | |
| # | | | |

## Expansions

| | Expand (2-4 words) | Recast (as needed) | Positive Reinforce-ment |
| --- | --- | --- | --- |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
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| # | | | |

# APPENDIX C

# SELF-EVALUATION TRAINING PROCEDURAL FIDELITY CHECKLIST

# SELF-EVALUATION TRAINING
## Procedural Checklist

**Teacher:**

**Date:** **Videotapes:**

| | | |
|---|---|---|
| **Coaching Session Notes** | 1. Complete first four questions from regular coaching session | ☐ |
| | a. Impressions of how this week went: | ☐ |
| | b. What went well? | ☐ |
| | c. Tell me how you worked on your goals this week. What were the results? | ☐ |
| | d. What have you learned or noticed, either about yourself or your students? | ☐ |
| **Viewing Videotapes Together:** | 1. Introduce Observation Checklist | ☐ |
| | 2. Explain methods of recording open ended questions and expansions (frequency and quality indicators) | ☐ |
| | 3. Observe video together and record observations, giving instruction as needed | ☐ |
| | 4. Discuss results | ☐ |
| **Weekly Goals** | • Review last week's goals | ☐ |
| | • Set new goals for the coming week as needed | ☐ |

# APPENDIX D

## ENHANCED SELF-EVALUATION TRAINING

## PROCEDURAL CHECKLIST

# ENHANCED SELF-EVALUATION TRAINING
## Procedural Checklist

**Teacher:**

**Date:** **Videotapes:**

| | |
|---|---|
| **Reflection** | • Begin with the first four coaching session questions |
| **Viewing Videotapes Together:** | 1. Review Observation Checklist<br>2. Review steps for expansions and open questions<br>3. Watch first videotape together, marking each occurrence of expansion and open question observed<br>4. Discuss results<br>5. From the same videotape watch specific clips of 10 opportunities for expansions and 6 opportunities for open questions<br>6. Model appropriate expansions and open questions for the first two opportunities of each strategy<br>7. Have teacher practice expansions or open questions for the remaining clips<br>8. Watch second videotape together, following steps 3 through 5, and 7, modeling only as necessary |
| **Activity Choices** | • Review directions from professional development training<br>• Give specific examples of successful activities from past videotaped observations<br>• Discuss future possible activities |
| **Weekly Goals** | • Continue with remaining two coaching session questions<br>• Set new goals for the coming week |

# APPENDIX E

# COACHING SESSION CHECKLIST

# COACHING SESSION NOTES

**Teacher:**

**Date:**

**Impressions of how this week went:**

**What went well?**

**Tell me how you worked on your goals this week. What were the results?**

**What have you learned or noticed, either about yourself or your students?**

**Where you would like to see improvement?**

**What would you like to do differently this coming week?**

**Goals:**

| | Open-ended Questions | Expansions |
|---|---|---|
| **Frequency** | | |
| **Quality** | | |

# APPENDIX F

## ENHANCED SELF-EVALUATION COACHING

## PROCEDURAL CHECKLIST

# ENHANCED SELF-EVALUATION COACHING
## Procedural Checklist

**Teacher:**
**Date:** **Videotapes:**

| | | |
|---|---|---|
| **Reflection** | • Begin with the first four coaching session questions<br>○ Impressions of how this week went:<br>○ What went well?<br>○ Tell me how you worked on your goals this week. What were the results?<br>○ What have you learned or noticed, either about yourself or your students? | ☐<br>☐<br>☐<br>☐ |
| **Viewing Videotapes Together:** | 1. Review Observation Checklist<br>2. Review components of expansions and open questions<br>3. Discuss results of self-evaluation of last week's videotape<br>4. From preselected videotape watch specific clips of 10 opportunities for expansions and 6 opportunities for open questions<br>5. Model appropriate expansions and open questions for the first two opportunities of each strategy<br>6. Have teacher practice expansions or open questions for the remaining clips | ☐<br>☐<br>☐<br>☐<br>☐<br>☐ |
| **Activity Choices** | • Review directions from professional development training<br>• Give specific examples of successful activities from past videotaped observations<br>• Discuss future possible activities | ☐<br>☐<br>☐ |
| **Weekly Goals** | • Continue with remaining two coaching session questions<br>• Set new goals for the coming week | ☐<br>☐ |

**SPECIFIC PRACTICE COACHING FOR:**

| | |
|---|---|
| **Open-ended Questions:** | **Expansions:** |

# APPENDIX G

# EXIT INTERVIEW

# EXIT INTERVIEW

**Teacher:** **Date:**

1. **In what way(s) have your skills as a teacher changed?**

2. **In what way or ways did participating in this study benefit your students?**

3. **What part of the coaching and self-evaluation process was the most beneficial to you?**

4. **If Head Start decided to use a form of coaching and self-evaluation using video observations as a way for teachers to grow professionally on a long-term basis, what changes to the way we conducted the study would you recommend?**

5. **What was the most important thing(s) you gained from this study?**

6. **Any other comments:**

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